



EMPLOYEE ASSESSMENT ORAL AND PRACTICAL SKILLS

CONDUCT DRILL RIG OFFSIDER DUTIES ASSESSMENT GUIDE:

REFERENCE N°:	
ELEMENT OF COMPETENCE:	Conduct Drill Rig Offsider Duties
WORKPLACE ASSESSOR:	
WORKPLACE OPERATOR:	
PERFORMANCE:	Conduct Drill Rig Offsider Duties
CONDITION:	GIVEN: • Drill Rig & Rods • Personal Protective Equipment (P.P.E) • Correct Tools • Mentor • Experienced Operator
STANDARD:	In accordance with Appin Colliery Standard Operating Procedures, Coal Mines Regulations Act, Occupational Health & Safety Procedures, & without injury to personnel or without damage to equipment.

RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>ORAL (QUESTIONS)</p> <p>1. Explain what P.P.E. you would use?</p> <ul style="list-style-type: none"> - safety glasses - gloves - ear protection



RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>2. Explain how you would ascertain if the area has been inspected?</p> <ul style="list-style-type: none"> - check Deputies Report Book and Deputies Noticeboard - ask Deputy - ask Undermanager / Control <p>3. Would you begin drilling operations without a Methane Detector?</p> <ul style="list-style-type: none"> - no <p>4. Explain use of mentor and identify checks to be carried out</p> <ul style="list-style-type: none"> - demonstrate percentage checks - percentage to be noted O2 19% low alarm 23% high alarm CH4 1% CO alarm at 50ppm - demonstrate operation of CH4 and O2 functions - ensure mentor is in correct position - 5m from face <p>5. Explain safety precautions you will follow when offsidng on a drill rig?</p> <ul style="list-style-type: none"> - communicate with operator (CRITICAL) - ensure area is safe and clear of debris (CRITICAL) - ensure correct drill rods are conveniently located - check that all necessary tools are available - check rods are not blocked - ensure when machine is in operation that employees remain at a minimal distance of 1.5 metres from behind the machine



RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>6. Identify if you would fit a drill rod whilst the drill string is moving?</p> <ul style="list-style-type: none"> - No (CRITICAL) <p>7. Explain what you would do prior to fitting or removing rods or drill bits from the drill rig</p> <ul style="list-style-type: none"> - check with operator and await his instructions (CRITICAL) <p>8. Explain why good housekeeping at the work site is essential</p> <ul style="list-style-type: none"> - to prevent any accidents or injuries i.e. slip, trip fall <p>9. Explain why you would keep clear of the back of the drill bed</p> <ul style="list-style-type: none"> - the drill string could travel back (sometimes at least 1.5m) <p>PRACTICAL (DEMONSTRATION) PLAN AND PREPARE</p> <p>10. Demonstrate the fitting of P.P.E.</p> <ul style="list-style-type: none"> - as listed in Point 1 <p>11. Demonstrate fitting of six (6) rods to the drill string</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <ul style="list-style-type: none"> - grease on thread - check with operator that everything is clear (CRITICAL) - enter rod into drill string - fit and tighten water swivel (where applicable) - stand clear and advise operator (CRITICAL)



RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>12. Demonstrate removal of six (6) rods to the drill string</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> <ul style="list-style-type: none"> - check with operator when rod is undone and ready to be removed (CRITICAL) - remove rod - stand clear and advise operator (CRITICAL) - stack rods neatly <p>13. Operator maintenance and repair</p> <ul style="list-style-type: none"> - to be advised <p>14. Operator reporting</p> <ul style="list-style-type: none"> - immediately report intersection of any structures / anomalies to Supervisor, Undermanager and/or Control - report details to Supervisor, on-coming operator and/or Control - record Drill Logs in Drilling Report Book - record any downtime encountered



**EMPLOYEE ASSESSMENT
ORAL AND PRACTICAL SKILLS**

**CONDUCT CH4 STAND PIPE
INSTALLATION ASSESSMENT GUIDE:**

ELEMENT OF COMPETENCE:	Conduct CH4 Stand Pipe Installation
WORKPLACE ASSESSOR:	
WORKPLACE OPERATOR:	
PERFORMANCE CONDITION:	Conduct Single Shot Survey Tool Operation GIVEN: <ul style="list-style-type: none"> • Personal Protective Equipment. (P.P.E.) • Drill rig and correct materials • Correctly inspected location • Mentor
STANDARD:	In accordance with Appin Colliery Standard Operating Procedures, Coal Mines Regulation Act, Occupational Health and Safety Procedures, and without injury to personnel or without damage to equipment.

RESULT		ASSESSMENT CRITERIA
COMPETENT	COACHING REQUIRED	
		ORAL (QUESTIONS) 1. What P.P.E. would be required when installing a stand pipe? <ul style="list-style-type: none"> - safety glasses (CRITICAL) - gloves - hearing protection - dust mask



RESULT		ASSESSMENT CRITERIA
COMPETENT	COACHING REQUIRED	
		2. Explain job checks and safety procedures prior to commencing job <ul style="list-style-type: none"> - understand job required, job location and hole to be drilled - ensure job site has been inspected - i.e. complies with CMRA - read previous shifts drilling report - check for personal danger tags or out of service tags
		3. Explain use of the mentor and identify checks to be carried out <ul style="list-style-type: none"> - demonstrate percentage checks (percentage to be noted) Note: <ul style="list-style-type: none"> O2 19% low alarm 23% high alarm CH4 alarm at 1% CO alarm at 50ppm - demonstrate operation of CH4 and O2 functions - ensure mentor is in correct position - 5m from face
		PRACTICAL (DEMONSTRATION) 4. Check machine is operational <ul style="list-style-type: none"> - no oil leaks - no water leaks - no air leaks - hoses are fitted with safety clips
		5. Check roof and sides and tidiness of work area, i.e. <ul style="list-style-type: none"> - scale down ribs and clean up - roll or tie up all unused hoses - remove and stack all unnecessary materials and tools
		6. Check area with AMD and set same <ul style="list-style-type: none"> - AMD set up with 10m of rig in upper third of roadway



RESULT		ASSESSMENT CRITERIA
COMPETENT	COACHING REQUIRED	
		<p>7. Check all necessary machinery, tools and materials are on job site</p> <ul style="list-style-type: none"> - stand pipe - brattice - reamer - electrical tape - rib borer - yachting knife - mixing wand - grout pump - mixing drum - stuffing box - min two (2) lengths of conduit - bull hoses - min three (3) bags grout - rock oil - min one (1) bag plaster - rod grease - scrimming material - ties - wedges - lump hammer - L5A Oil <p>8. Explain the different types of stand pipes used and why they are used in different areas, e.g. copper standpipe?</p> <ul style="list-style-type: none"> - copper, plastic, and fibreglass stand pipes are used when a hole is in such a position that it will need to be removed as part of the mining cycle. Steel standpipes are used when the hole will stay in place



RESULT		ASSESSMENT CRITERIA
COMPETENT	COACHING REQUIRED	
		<p>9. Demonstrate how you would set up the machine</p> <ul style="list-style-type: none"> - as instructed by Supervisor or Deputy - with due regard to roof, sides and job required - to survey tags - line drill rig up to suit hole number required. Use site strings and drill rod located in drill rig - pay particular attention to dip of hole - use level board or protractor <p>Note: This is particularly important when grouting</p> <ul style="list-style-type: none"> - 'up hole' fill in short conduit - 'down hole' fill in long conduit <p>10. Fit safety glasses prior to job commencement, drill and ream out area for stand pipe to required depth</p> <ul style="list-style-type: none"> - determine depth of hole to be drilled to accommodate stand pipe - observe that hole is drilled with appropriate feed rate, i.e. hole does not bend off a straight line due to excessive feed rate - observe that drill rods and bit do not sag at start of hole - flush hole clean with water then air <p>11. Swing grippers out of the way and swing drill head out of the way</p> <p>FORM SEAM HOLES</p> <p>12. Cover inbye end of stand pipe with substantial material and secure with tape</p> <p>13. Secure conduit breathing and grouting tubes to stand pipe, using electrical tape (mark short conduit - see 'note' above)</p> <p>14. Insert stand pipe into hole (200-300mm of stand pipe should be protruding from mouth of hole)</p>



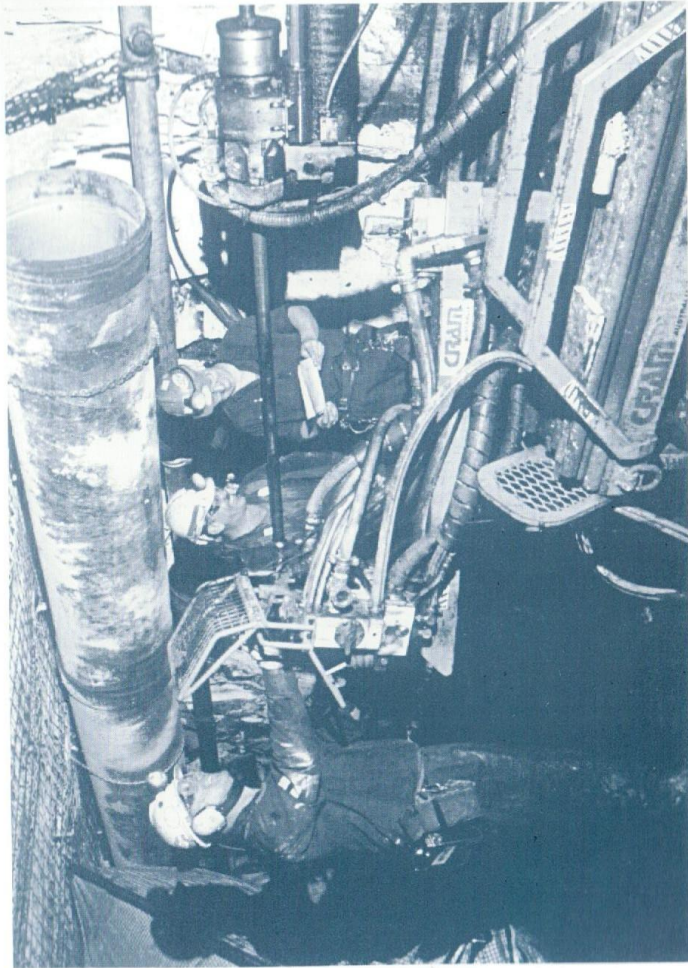
RESULT		ASSESSMENT CRITERIA
COMPETENT	COACHING REQUIRED	
		<p>15. Push drill rod into stand pipe</p> <p>16. Wedge and pack stand pipe central to drill rods</p> <p>17. Mix plaster and use as a collar to seal hole</p> <ul style="list-style-type: none"> - do not make plaster too wet - use scrimming - wait ten to fifteen (10 - 15) minutes for collar to set <p>18. Using appropriate P.P.E., mix grout and water to required consistency using rib borer mixing wand and mixing drum</p> <ul style="list-style-type: none"> - one (1) bag of grout per 10 litres of water - check grout pump in water prior to mixing grout to ensure that it is operating correctly <p>19. Using a grout pump, pump into grouting tube until it flows out of the breathing tube. Stop, bend and seal both conduits using electrical tape.</p> <ul style="list-style-type: none"> - use short conduit in up holes for pumping grout - use long conduit on down holes <p>20. In the case of cross measure holes</p> <ul style="list-style-type: none"> - hole to be flushed clean using air (safety glasses to be worn) (CRITICAL) - after mixing grout, it can be poured down the hole where possible otherwise use grout pump until the hole is filled - make a dam around mouth of hole and add more grout to mixture to thicken it up and use this mixture to finish off the collar for the hole <p>21. Clean mixing drum with water</p>

Doc N° OS-ATC-EA008



RESULT		ASSESSMENT CRITERIA
COMPETENT	COACHING REQUIRED	
		<p>22. Clean grout pump using clean water and a small amount of LSA oil until pump is thoroughly cleaned</p> <p>23. Allow sufficient time for grout to set (approx. 60 minutes)</p> <p>24. Complete final visual check</p> <ul style="list-style-type: none"> - clean up area - stack unused grout and plaster out of way - stack rib borer, mixing wand and mixing drum together out of the way and in a safe place - prepare stuffing box and bull hose prior to recommencing drilling operations - ensure air, water and power is isolated <p>25. Operator reporting</p> <ul style="list-style-type: none"> - report details to supervisor, on-coming operator and/or Control - record results in Shift Equipment Report Book

Doc N° OS-ATC-EA008



Rotary Drilling Operation



**EMPLOYEE ASSESSMENT
ORAL AND PRACTICAL SKILLS**

*CONDUCT ROTATIONAL DRILLING
OPERATIONS ASSESSMENT GUIDE:*

REFERENCE N°:	
ELEMENT OF COMPETENCE:	Conduct Rotational Drilling Operations
WORKPLACE ASSESSOR:	
WORKPLACE OPERATOR:	
PERFORMANCE:	Conduct Rotational Drilling Operations
CONDITION:	GIVEN: <ul style="list-style-type: none"> • Proram Drill Rig • Mentor • Personal Protective Equipment (P.P.E) • Correct Tools • Correct Inspected Location
STANDARD:	In accordance with Appin Colliery Standard Operating Procedures, Coal Mines Regulations Act, Occupational Health & Safety Procedures, & without injury to personnel or without damage to equipment.

RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>ORAL (QUESTIONS)</p> <p>1. Explain what P.P.E. you would use?</p> <ul style="list-style-type: none"> - safety glasses - gloves - ear protection



RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>2. Explain the safety checks you would carry out</p> <ul style="list-style-type: none"> - check for 'Out of Service' tags - check for damaged equipment - check for loose or missing items - use correct P.P.E - check mentor present and operational - check roof and sides <p>3. Explain purpose of report book</p> <ul style="list-style-type: none"> - to record drill progress and record any geological anomalies whilst drilling <p>4. Identify how you would obtain details required to carry out the job</p> <ul style="list-style-type: none"> - read notes prepared by drilling engineer - ask supervisor - ask drilling engineer - read Report Book <p>5. Explain use of mentor and identify checks to be carried out</p> <ul style="list-style-type: none"> - demonstrate percentage checks - percentage to be noted: <ul style="list-style-type: none"> O₂ 9% low alarm 23% high alarm CH₄ alarm at 1% CO alarm at 50ppm - demonstrate operation of CH₄ and O₂ functions - ensure mentor is in correct position - 5m from face <p>6. Communicate with supervisor and/or off-going operator</p> <ul style="list-style-type: none"> - Talk to operator's about current drilling status, hazards, drilling conditions and other related matters



RESULT		ASSESSMENT CRITERIA - PLAN AND PREPARE
COMPETENT	COACHING REQUIRED	
		<p>7. Confirm statutory inspections have been completed by a mining official</p> <ul style="list-style-type: none"> - Read Deputy's report at Deputy Station or receive verbal confirmation from Deputy, if present at site - on remote sites, check deputies board and/or confirm with Control <p>8. Inspect area and mining environment for hazards</p> <ul style="list-style-type: none"> - check roof and sides for security - check for accumulations of gases using a mentor - position mentor correctly (upper third roadway, 10m return side of hole) - remedy any defects if possible <p>9. Conduct site inspection for adequate supplies and equipment</p> <ul style="list-style-type: none"> - mark off supplies and equipment check list - report deficiencies to supervisor <p>10. Carry out pre-start checks</p> <ul style="list-style-type: none"> - check for tags - 'Personal Danger' tags - 'Out of Service' tags - check for damaged equipment - check for loose and/or missing items - check for excessive coal build up - check position of machine is secure - check roof jacks are hard in roof - check suction is in place and working correctly - check for water in line and drain if required - check levers and controls are off or in neutral - check oil level is adequate



RESULT		ASSESSMENT CRITERIA - OPERATE
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - check turtle - check air supply and ensure safety clips are in place - check safety switch is reset (if fitted) - safety switch will close when air is turned off - check wast water pump is operational - remedy any defects if possible, or report to supervisor <p>11. Check drilling report book</p> <ul style="list-style-type: none"> - check previous shift drilling report for the outcomes and current status of the drilling operation <p>OPERATION</p> <p>12. Start up procedure</p> <ul style="list-style-type: none"> - check air and water valves on machine are OFF - check main supply air and water hoses for damage back to main valves - check all levers are in 'neutral' position - make sure hoses are tied up and area is clean - open main air and water valves slowly to 'fully open' position - open air valve at machine controls <p>13. Demonstrate operational requirements</p> <ul style="list-style-type: none"> - check P.P.E. is in use - safety glasses - gloves - ear protection - start drilling - check water turned on and wait until flushing commences - start forward rotation - check for correct feed rate - start feed



RESULT		ASSESSMENT CRITERIA - OPERATE
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - check rods do not bog whilst drilling - drill to rod length - stop drilling - stop feed - stop rotation - turn off water - record drilling characteristics on each rod in book provided - operate grippers to hold rod at rod joint - reverse rotation to uncouple water swivel rod - pull chuck back full length of travel - install new rod - place rod between grippers and chuck & screw to engage rods - ensure off-sider removes hands (CRITICAL) - rotate in forward direction slowly until rod is tightened - repeat cycle from 'start drilling' <p>14. Report</p> <ul style="list-style-type: none"> - at the end of shift - fill out drilling log with complete details - convey shift outcomes to oncoming shift - hand in drilling report to a supervisor or Gas Drainage Office <p>MAINTENANCE AND REPAIR</p> <p>Note: All maintenance and repair will require the same planning and preparation PLUS operator reporting (As shown below in Sections 15 & 16)</p> <p>15. Plan and prepare</p> <ul style="list-style-type: none"> - confirm that it is safe to enter district - check roof and sides for safety



RESULT		ASSESSMENT CRITERIA - MAINTENANCE AND REPAIR
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - check the machine has sufficient working room and is cleaned adequately to allow work to progress safely - withdraw the drill rods from the front grippers - isolate air supply to machine (CRITICAL) - attach personal danger tag to isolating valve (CRITICAL) - de-pressurise the system (CRITICAL) <p>16. Report</p> <ul style="list-style-type: none"> - remove danger tags (CRITICAL) - test operation of component - affix 'out of service' tag to unit and arrange transport to surface, notify supervisor of repair by recording in drilling report <p>A. ROD HOLDER REPLACEMENT</p> <p>17. Carry out replacement</p> <ul style="list-style-type: none"> - crack the bleed screws on top of the rod holder to release the oil pressure in the rod holder - remove hose from the intensifier to the rod holder - remove the two (2) retaining pins which attach the rod holder to the machine - position the new rod holder to machine and locate retaining pins - reconnect delivery hose <p>18. Demonstrate recharging rod holder</p> <ul style="list-style-type: none"> - attach charge gun to intensifier - pump handle - observe indicator pin move until it is flush with the housing OR - turn on air supply to machine - turn recharging valve on



RESULT		ASSESSMENT CRITERIA - MAINTENANCE AND REPAIR
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - observe indicator pin move until it is flush with the housing - turn recharging valve off <p>19. Demonstrate bleeding of rod holder</p> <ul style="list-style-type: none"> - crack bleed screws to release pressure - observe hydraulic fluid being released with entrapped air bubbles and allow flow to continue until all air bubbles are gone - tighten screws - hand tighten only, i.e. no leakage <p>B. CHUCK REPLACEMENT</p> <p>20. Carry out replacement</p> <ul style="list-style-type: none"> - remove the 10mm quick coupler hose from the commutator - remove the twelve (12) off M8* 20mm unbrako bolts from behind the chuck (use 8mm allen key) - remove the chuck unit - inspect the bearing cap for wear or damage - inspect both pinion gears on the motors for wear or damage - install the new chuck unit - check that the main ring gear meshes with the two (2) pinion gears by rotating the chuck backwards and forwards - bolt the chuck into position with the twelve (12) off M8*20mm unbrako bolts - reattach the 10mm hose to the chuck <p>C. ADJUST FEED CABLE</p> <p>21. Carry out maintenance</p> <ul style="list-style-type: none"> - check tension of the feed rope by lifting the feed rope mid-way between the rotation unit and the rear of the machine. When the rope is pulled up and released it should spring back - if not, adjust - undo the banjo bolt nuts and swing the rotation unit to the side



RESULT		ASSESSMENT CRITERIA - MAINTENANCE AND REPAIR
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - turn the 8mm allen key to adjust the feed tensioning bolt - check that sufficient tension can be obtained, if not then the rope will have to be changed <p>D. ROTATION UNIT</p> <p>22. Carry out replacement</p> <ul style="list-style-type: none"> - remove rotation hose manifold from top of unit by unclipping the cover centre clips - remove chuck inlet hose quick coupler - loosen the left hand side retaining nuts - remove the right hand side retaining nuts from the banjo bolts - lift the rotation unit from the feed bed plate - install new rotation unit using the reverse of the above procedure <p>E. FEED TUBE UNIT</p> <p>23. Carry out replacement</p> <ul style="list-style-type: none"> - remove rotation unit as per standard job instruction - remove rod holder as per standard job instruction - remove the intensifier quick coupler hose - remove front stringer clamp from the intensifier housing - unclip the two (2) manifold clips from the centre of the feed bed - unclip the two (2) large retaining feed bed clamps - lift the feed bed from the mounting point - install new feed bed, reversing the above procedure <p>F. FRONT STRINGER CLAMP</p> <p>24. Carry out replacement</p> <ul style="list-style-type: none"> - open the stringer clamp using the over-centre clamp - remove the two (2) 12mm bolts holding the clamp to the intensifier housing - replace the 12mm bolts and tighten



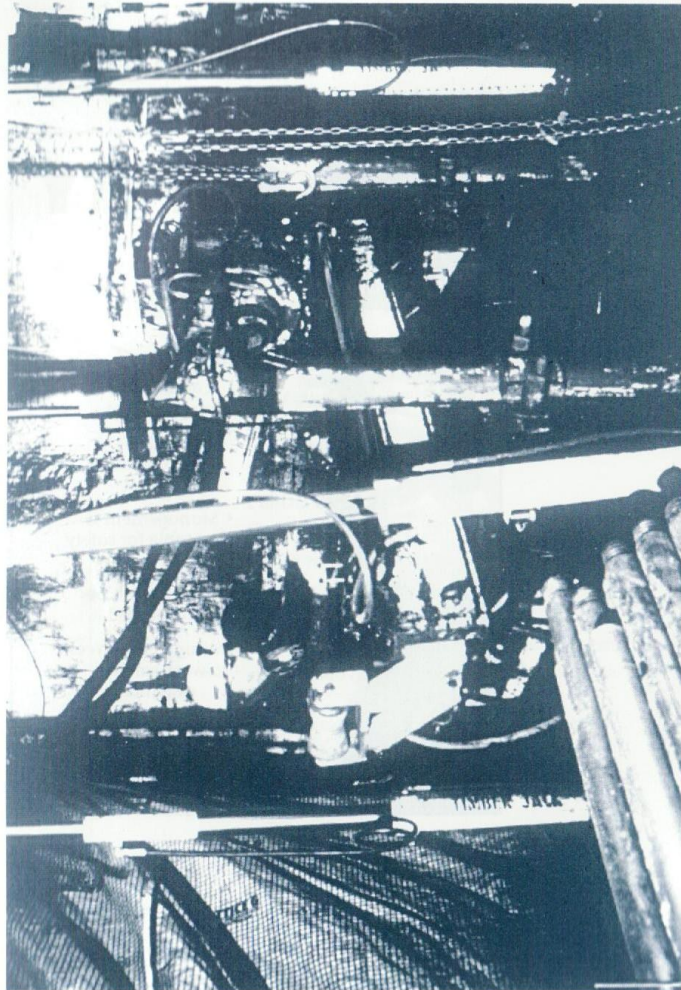
WHAT WE
BELIEVE
AT OUR
COLLIERY

SAFETY

All injuries can
be prevented

- Working safely is a condition of employment
- Employee involvement is essential
- Management is accountable for safety
- All operating exposures can be safeguarded
- Training employees to work safely is essential





**EMPLOYEE ASSESSMENT
ORAL AND PRACTICAL SKILLS**

*CONDUCT HYDRAULIC ROTATIONAL DRILLING
& RIG OPERATIONS ASSESSMENT GUIDE:*

ELEMENT OF COMPETENCE:	Conduct Hydraulic Rotational Drilling & Rig Operations
WORKPLACE ASSESSOR:	
WORKPLACE OPERATOR:	
PERFORMANCE: CONDITION:	Operate a Kempe Drill Rig GIVEN: <ul style="list-style-type: none"> • Drill Rig • Drill Rods • Engineers detail • Correct Tools • Mentor • P.P.E. (Personal Protective Equipment)
STANDARD:	In accordance with Appin Colliery Standard Operating Procedures, Coal Mines Regulations Act, Occupational Health & Safety Procedures, & without injury to personnel or without damage to equipment.

RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>ORAL (QUESTIONS)</p> <p>1. Explain how often a Colliery Official is required to make an inspection pursuant to the Coal Mines Regulation</p> <p>an inspection is required no more than four (4) hours before work commences and inspections at four (4) hourly intervals while drilling operations are underway, or at seven (7) hourly intervals whilst general operations are undertaken, such as setting up the rig or recovering gear</p>



RESULT		ASSESSMENT CRITERIA - OPERATION OF MACHINE
COMPETENT	COACHING REQUIRED	
		<p>2. Explain the action you would take if these inspections were not fulfilled or if you are in doubt as to whether an inspection had been carried out?</p> <ul style="list-style-type: none"> - If a statutory inspection is not confirmed or completed, then you can ask the panel deputy, read the Shift Equipment Report Book, or telephone Control and ask them to clarify the situation if possible, and if necessary, arrange for the appropriate inspection to be completed <p>3. What P.P.E. would you use when drilling?</p> <ul style="list-style-type: none"> - safety glasses - gloves - ear protection <p>4. What safety precautions would you use when drilling?</p> <ul style="list-style-type: none"> - check for 'out of service' and/or 'danger' tags - check for damage to equipment - check for loose or missing items - use correct P.P.E. - check mentor present and operational - check roof and sides <p>5. Explain the purpose of the Shift Equipment Report Book</p> <ul style="list-style-type: none"> - to record drill progress and record any geological anomalies encountered whilst drilling <p>6. Identify how you would obtain details required to carry out the job</p> <ul style="list-style-type: none"> - read notes prepared by drilling engineer - ask Supervisor and/or Control - ask drilling engineer



RESULT		ASSESSMENT CRITERIA - PLAN AND PREPARE									
COMPETENT	COACHING REQUIRED										
		<p>7. Explain use of mentor and identify checks to be carried out</p> <ul style="list-style-type: none"> - demonstrate percentage checks - percentage to be noted: <table border="0" style="margin-left: 20px;"> <tr> <td>O₂</td> <td>19% low alarm</td> <td>23% high alarm</td> </tr> <tr> <td>CH₄</td> <td>alarm at 1%</td> <td></td> </tr> <tr> <td>CO</td> <td>alarm at 50ppm</td> <td></td> </tr> </table> - demonstrate operation of CH₄ and O₂ functions - ensure mentor is in correct position - 5m from face <p>PRACTICAL (DEMONSTRATION)</p> <p>8. Plan and prepare for operations</p> <ul style="list-style-type: none"> - communicate with supervisor and/or off-going operator - talk to operators about current drilling status, hazards, drilling conditions and other related factors - confirm statutory inspections have been completed by a mining official - read deputy's report book at deputy's station or receive verbal confirmation from deputy (if present at site) - read Deputy's board - inspect area and mining environment for hazards - check roof and sides for security - check for accumulations of gases using AMD - position AMD correctly (upper third of roadway within 10m of the return side of the hole) - remedy any defects if possible - conduct site inspection for adequate supplies and equipment - mark off supplies and equipment - report deficiencies to supervisor and record in drilling report <p>9. Carry out pre start checks</p> <ul style="list-style-type: none"> - check for 'danger tags' or 'out of service' tags - check equipment for damage 	O ₂	19% low alarm	23% high alarm	CH ₄	alarm at 1%		CO	alarm at 50ppm	
O ₂	19% low alarm	23% high alarm									
CH ₄	alarm at 1%										
CO	alarm at 50ppm										



RESULT		ASSESSMENT CRITERIA - PLAN AND PREPARE
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - check for loose or missing items - check for excessive coal build up - check position of machine is secure - check roof jacks are hard in roof - check suction is in place and working correctly - check for water in line and drain if required - check levers and controls are off or in neutral - check hydraulic oil level is adequate - check air supply and ensure safety clips are in place - check hoses are properly fitted and not damaged - check waste water pump is operational - remedy any defects if possible or report to supervisor - check drilling report book for previous shift outcome and current status of the drilling operations <p>10. Safe operation of Hydraulic Rotational Drill Rig</p> <ul style="list-style-type: none"> - turn on power and water - power on at load centre (may require insertion of plug) - operate drilling equipment - switch on hydraulic pump - turn on water and allow tank to fill - turn on water pump - drill forward - allow water to flush drill face - close chuck and open rod holder - operate forward rotation - operate forward feed (observe correct feed rate for rotation i.e. feed too high - rods will jam; feed too slow - bit may not stay in seam or may hit floor. This is indicated by listening to the hydraulic pump



RESULT		ASSESSMENT CRITERIA - OPERATE
COMPETENT	COACHING REQUIRED	
		<ul style="list-style-type: none"> - it will begin to labour as the feed is increased. When change in pitch is heard, correct setting has been attained. - addition of drill rod to advance hole - position rod joint to facilitate uncoupling - add next rod - activate 'couple/uncouple' lever - apply forward rotation to tighten rods - add water and flush drill string <p>11. Demonstrate 'stop drilling' procedure</p> <ul style="list-style-type: none"> - means a hole has reached it's required depth - flush with water and then air to clean hole - withdraw drill string - position joint to facilitate breaking rods - operate 'couple/uncouple' lever with rod clamps ON - reverse rotation to uncouple rods - remove rod and stack neatly - when all rods removed, put hole on 'suction' - remove stifling box - install reducer and valve set - install suction hose to valve and suction inlet - ensure valve is fully ON at hole and at suction range - ensure air, water and power is isolated <p>12. Operator Reporting</p> <ul style="list-style-type: none"> - report details to supervisor, on-coming operator and/or Control - record results in Shift Equipment Report Book <p>MAINTENANCE AND REPAIR</p> <p>Note: All maintenance and repair will require the same planning and preparation PLUS operator reporting (As shown below in Sections 13 & 14)</p>