

UNDERGROUND EMERGENCY SYSTEM

NORTHEASTERN REGION UNDERGROUND MINES

ASSESSMENT CRITERIA

- UNDERGROUND REGULATIONS
- AS 4801
- MDG 1020
- THE MINES DOCUMENTED SYSTEMS

RISK ASSESSMENT

- VERY FEW MINES HAVE A RISK ASSESSMENT
- LITTLE EVIDENCE OF MDG 1020 BEING USED
- WHERE R/A HAS BEEN DONE THERE IS NO CROSS CHECK TO SEE THAT CONTROLS MAKE THE FINAL DOCUMENT
- GENERALLY MAJOR CONTROLS HAVE NOT BEEN CONSIDERED AS PART OF THE WITHDRAWAL PROCEDURES
- LITTLE DOCUMENTATION OF CONSULTATION

EGRESS ROUTES

- NON SEGREGATED INTAKE (BELT ROAD) WIDELY USED AS 2ND EGRESS
- PRIMARY ESCAPE IS GENERALLY IN TRANSPORT – FEW SYSTEMS INCLUDE PROVISION OF TRANSPORT
- 2ND EGRESS WALKING CONDITIONS ARE OFTEN DIFFICULT
- GENERALLY A LIFELINE EXISTS IN ONE EGRESS
- MOST OPERATIONS DO NOT REQUIRE 2ND EGRESS WALKS
- REFLECTIVE STREAMERS TO INDICATE PRIMARY EGRESS

EARLY WARNING

- TARPS FOR CO MONITORING GENERALLY TRIGGER INVESTIGATION ONLY UNTIL 50ppm
- NOT ALL MINES HAVE CO MONITORING ON PANEL BELTS OR TRIPPERS
- TUBE BUNDLE TARPS NOT ALWAYS KNOWN OR UNDERSTOOD BY CP

TRAINING

- TRAINING SPECIFIED IN MINES SYSTEM OFTEN NOT CARRIED OUT
- DIFFERENT TRAINING REQUIREMENTS FOR EMPLOYEES/CONTRACTORS
- STAFF MEMBERS OFTEN MISSING TRAINING
- NO REFRESHER TRAINING IN THE SYSTEM OR AFTER CHANGES
- NO SPECIFIC TRAINING FOR SUPERVISORS
- LIMITED TRAINING FOR CP
- RECORD KEEPING GENERALLY POOR – IS NOT USED TO IDENTIFY MISSED OR OUT OF DATE TRAINING, OR KNOWLEDGE BASED TRAINING

RESCUERS AND TAGGING

- MOST MINES USE FSR ON THE BELT
- MOST MINES USE CABA FROM THE CRIB ROOM
- LACK OF PHONES OR DACS AT CHANGE OVER/REFILL STATIONS
- ONLY ONE MINE HAS A FORM OF “RESPIRABLE AIR CHANGE OVER STATION”
- TAGGING IS STILL THE EXCEPTION
- SIGNAGE POOR – OFTEN ONLY FROM ONE ROAD
- GENERALLY NO CHANGE OVER PROTOCOL

SYSTEM ISSUES

- GENERALLY POOR DOCUMENT CONTROL
- NON-COMPLIANCE WITH REVIEW AND AUDIT REQUIREMENTS WHEN DOCUMENTED
- NO CROSS CHECK TO STATUTORY REQUIREMENTS
- MANAGEMENT PLANS NOT INCLUDED IN MANAGEMENT REVIEW
- MOST MINES DO NOT HAVE AN EFFECTIVE CORRECTIVE ACTION PROCEDURE

OTHER ISSUES

- GENERALLY NO DOCUMENTED PROCEDURES FOR RAPID, EFFECTIVE SEALING OF THE MINE
- TESTING REGIME POORLY ADDRESSED IN DOCUMENTS, AND NOT EFFECTIVELY COMPLIED WITH WHEN ADDRESSED
- NO COHERENT STRATEGY FOR PROVISION OF FIRST AID SKILLS, INCLUDING ENTONOX/PENTHRANE USE
- COMMUNICATIONS PROTOCOLS DO NOT TAKE INTO ACCOUNT ISSUES WITH FSR AND CHEMICAL SCSR

FUTURE CONSIDERATIONS

- Risk Assessment
 - Basic requirement for a specific R/A
- Second Egress
 - Segregated intake or return or intake
 - Second transport road
- Rescuers
 - Determination of cache/refill distances
 - Availability outbye
 - Training
 - Consideration of RACOS

FUTURE CONSIDERATIONS

- Communications
 - PED or similar
 - Tracking devices
- Response
 - Control room
 - Minimum qualifications of operator
- Transport
 - Provision for all personnel
- Training
 - Minimum standards
 - Out of mine if not current