



Module 1 Mine Core Skills syllabus

As copied direct from the LCMLA Handbook Edition 5 2010

PRE-TRIP CHECKS

Weather Forecast & Source
 Water Levels and Fluctuations – recent rainfall / catchment areas
 Effects of Bad Weather – surface
 Access Procedures
 Conservation Awareness – surface
 Destination Notes
 Mines / Cave Rescue Call Out Procedure
 Guidebook / Survey Information
 Navigation – surface
 Clothing – suitability for wet / dry venues
 Helmet / Belts / Boots – suitability
 Lighting – suitability / duration / maintenance etc
 Technical Gear – suitability / limitations / maintenance of rope / krab / sling etc

UNDERGROUND EMERGENCY

GEAR

Spare Lighting – suitability / duration
 First Aid Kit
 Emergency Food
 Survival – shelter / warmth
 Knife
 Writing Material

UNDERGROUND HAZARDS

Adit or Other Entrance
 Roof Supports
 Bad Ground
 False Floors
 Stacked Deads
 Shafts – Bypass Method
 Flooded Shafts – Bypass Method
 Submerged Obstacles
 Hoppers
 Rotten Stemples / Ladders / Staging
 Cables / Chains / Pipework
 Abandoned Machinery
 Old Explosives / Detonators
 Dumped Chemicals
 Dangerous Gases (inc. Radon)
 Poor Ventilation – treatment / action

Weil's Disease
 Pollution
 Loose / Slippery Rocks
 Deep Water (See also 6.4 NAVIGATING DEEP WATER IN CAVES).
 Awareness of Flooding – speed of / likely effects
 Evidence of mine's reaction to flooding
 Difficulty of Rescue
 Statistics / Common Rescue Incidents

SURFACE HAZARDS

Shaft Tops
 Loose Shaft Lining (Ginging)
 Unstable Spoil Heaps
 Unfenced Excavations (Stopes)
 Wheelpits
 Abandoned Buildings
 Abandoned Machinery
 Unconsolidated Slimes Dams

CONSERVATION

Artefacts
 Minerals / Formations
 Flora & Fauna (inc Bats & Hibernacula)
 Effect of Litter & Pollutants
 Public Relations
 HISTORY
 Brief History of Named Mines
 General Working Methods
 Minerals obtained

ACCESS / LAW / INFORMATION

Land Ownership / Access Arrangements
 Mine Ownership
 Mineral Rights Ownership
 Application of Legislation
 Survey & Information Sources

TECHNICAL SKILLS

Surface Navigation in Poor Visibility / Darkness
 Underground navigation / Survey interpretation / Timing
 Suitable Knots



Selection and use of suitable Belay Points
(natural and artificial including bolts)
Lifelining rope only
Lifelining using Italian Hitch / Slings / Krabs etc
Assisted Handline / Hoist
Traverse
Improvised Harness – rope only / other
Unprotected Climbs – position of leader
Use of Fixed Aids – chains / ladders / ropes
Communication / Group Management
Leadership / Judgement

ACCIDENT & EMERGENCY PROCEDURES

Incident Management
Assessment / First Aid Treatment / Plan of
Action
Rescue Call Out
Hypothermia – awareness / treatment /
action
Light Failure
Cancellation of Destination Note
Overdue Problems
Access to Dry Clothing