### Module 4 CIC Assessment Mines Module Scoring Rationale

- 1. Fail: A poor performance
- 2. Defer: Unsatisfactory below required level but should be able to remedy
- 3. Developing: At the standard in most elements but areas can improve
- 4. Good: Mature client centred approach
- **5. Excellent:** Exceptional performance aspirational

# Pre trip checks & knowledge (assuming knowledge of destination known to candidate in sufficient time to make some enquires)

Access

- 1. Candidate has gained no knowledge of the mine, local area or access details.
- 2. Candidate has poor knowledge of the mine, local area or access details
- 3. Candidate has a general awareness of specific information about the mine, local area and access.
- 4. Candidate has excellent knowledge of the mine type, local area, history and a firm understanding of the access situation both here and nationally.
- 5. As for 4. But the candidate has also been involved in a mine access negotiation, regional mine access groups or national access groups.

Weather and Flood Risk Assessment

- 1. The candidate had made no effort to look at a forecast. Does not know the flood risk or pattern of venue
- 2. The candidate had at least one source of weather forecast for the day and can give outline of flood aspects of venue but cannot relate to the current conditions.
- 3. The candidate had several sources of weather forecast and could interpret these well.
- 4. The candidate had several sources of weather forecast and could interpret these well. Can discuss the flood pattern well and make good decisions for the day an awareness of previous precipitation in the area was also present.
- 5. The candidate had several sources of weather forecast and could interpret these well. He/she could also determine the effect this would have on the system and involve others in decision making.

**Conservation Issues** 

- 1. The candidate has no understanding for the need for conservation.
- 2. The candidate has an awareness of conservation eg keeping to paths on the surface and within taped areas underground.
- 3. The candidate has an awareness of conservation and understands the fragility of the environment and how mine explorers can impact upon this.
- 4. The candidate has good awareness of conservation and can impart the reasons for conservation to clients with examples.



5. The candidate has good awareness of conservation and can impart the reasons for conservation to clients. Candidate has personal involvement with mine conservation.

#### Surface Navigation

Navigation - Surface strategies for poor visibility, Grid references, Scales, Bearings, Distances by timing, Distances by pacing.

- 1. The candidate would not be able to find the mine without help
- 2. The candidate could find the mine in good weather conditions.
- 3. The candidate could find the mine in poor visibility or at night with reasonable accuracy/speed.
- 4. The candidate could find the mine in all conditions swiftly and without difficulty.
- 5. The candidate could find the mine in all conditions swiftly and without difficulty He/she could also impart navigational skills to a client whilst navigating themselves.

Destination Notes/Call Out Procedure

- 1. No call out procedure in place.
- 2. The candidate has left call out.
- 3. The candidate has left call out and has an understanding of the CRO. The candidate knows the importance of correct and appropriate information left with an appropriate person.
- 4. The candidate has left call out and has an understanding of the CRO. The candidate knows the importance of correct and appropriate information left with an appropriate person. In addition, explain the procedure once a call out in initiated and expected timescales etc
- 5. The candidate is a member of their local rescue team in addition to above.

#### Access and the law

Access procedures and public relations with landowners/other users. Site status (SSSI, RIGS) and Regional Caving Council access arrangements (general knowledge of).

- 1. Little or no awareness of access procedures
- 2. The candidate understands mine access procedures for only one region of the UK.
- 3. The candidate understands mine access procedures in several UK areas.
- 4. The candidate had a wide knowledge of access procedures across the UK, an awareness of the work of regional mine access and why there is a need to negotiate with landowners and other users. The candidate has an understanding of access law and how it relates to going underground
- 5. The candidate had been part of access negotiations for a venue or region in addition to above

Personal/Emergency Equipment

- 1. The candidate was just wearing personal kit unsuitable for the trip and no emergency kit.
- 2. The candidate was wearing appropriate clothing for the conditions.



- 3. The candidate was wearing appropriate clothing for the conditions and emergency personal kit. Eg hat and scarf, small flask
- 4. The candidate had appropriate clothing for the conditions and was carrying appropriate emergency kit e.g. KISU, spare clothing, flask for themselves and assessor.
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## Surface mining hazards. E.g. Open stopes, shaft tops, wheel pits, slimes dams, buildings, chemicals and machinery.

- 1. Candidate has very little knowledge or is fundamentally unsafe around the mine surface environment. Would be unable to produce an adequate risk assessment for the environment.
- 2. Candidate does not show enough knowledge or situational awareness to be thought of as safe to lead others in the surface area around the mine at this time. Would be unable to produce an adequate risk assessment for the environment.
- 3. Candidate has good hazard awareness and can spot and mitigate hazards as well as being able to manage others in that environment or bypass the hazard. Could produce a generic risk assessment for operating in this environment.
- 4. Candidate has very good hazard awareness and can spot and mitigate hazards as well as being able to instruct others how they might manage people in that environment or remove the hazard. Could produce a client or activity specific risk assessment or advise others on the creation of risk assessments for this environment.
- 5. As for 4. But the candidate has also been involved in mine inspection or surface surveys, mine entrance safety works or other safety projects in the surface environment.

# Risk assessment & underground hazards. E.g. adit mouths, deads, pack walls, shafts, stemples, shoring, ore shoots and hoppers, flooded workings, gasses, chemicals and machinery.

- 1. Candidate has very little knowledge or is fundamentally unsafe in the mine environment. Would be unable to produce an adequate risk assessment for the environment.
- 2. Candidate does not show enough knowledge or situational awareness to be thought of as safe to lead others in the mine environment at this time. Would be unable to produce an adequate risk assessment for the environment.
- 3. Candidate has good hazard awareness and can spot and mitigate hazards as well as being able to manage others in that environment or bypass the hazard. Could produce a generic risk assessment for operating in this environment.
- 4. Candidate has very good hazard awareness and can spot and mitigate hazards as well as being able to instruct others how they might manage people in that environment or remove the hazard. Could produce a client or activity specific risk assessment or advise others on the creation of risk assessments for this environment.



5. As for 4. But the candidate has also been involved in mine inspection, mine safety works or other safety projects in the mine environment.

#### Gasses

- 1. Candidate has no gas awareness or detection equipment.
- 2. Candidate aware of mine gasses but lacks sufficient knowledge/equipment for detection or avoidance. No knowledge of Radon hazards.
- 3. Candidate is aware of all common gas types and can show a method for detection as well as knowing the common symptoms of exposure. Aware of Radon and its effects and legal requirements surrounding monitoring of workers.
- 4. Candidate has an excellent knowledge of mine gasses and radon. Candidate is knowledgeable about several methods of gas detection and has equipment for testing the air is suspect.
- 5. As for 4. But candidate also has background in mine rescue or the mine industry or has demonstrated they have taught others about this topic. Candidate is highly knowledgeable about detecting mine gasses and mine gas safety. They have taught gas safety or been involved in gas testing for HMI, confined space training or a Regional Caving Council.

#### **Underground navigation**

- 1. Candidate consistently lost.
- 2. Candidate regularly unsure of location but not lost. Lacking confidence.
- 3. Candidate competently navigates the mine but might make some navigation errors that they correct themselves.
- 4. Candidate navigates competently and smoothly around the mine.
- 5. As for 4. But also, the candidate has experience in, surveying or drawing mine plans or rigging topos for personal use or publication.

#### Geology

- 1. Candidate shows very poor or no knowledge relating to geology or mineralisation.
- 2. Candidate has very limited knowledge of geology or mineralisation beyond their main region.
- 3. Candidate has a good knowledge of geology and mineralisation in their home region's common mines and also a good baseline knowledge of other main mine types of the UK.
- 4. Candidate has a strong knowledge of geology and mineralisation for all the common mine types of the UK.
- 5. Candidate has excellent knowledge in this area and/or has written articles in mining history / geology publications.

#### Environment

- 1. Candidate has little to no knowledge of the underground environment.
- 2. Candidate has poor knowledge of flora, fauna or general mine biology.
- 3. Candidate has a good knowledge of bats, microbes and common insects.
- 4. Candidate has good knowledge of the criteria and can identify a number of organisms / plants and knows details of their lifecycles or formation.
- 5. The candidate has a very high level of knowledge around bats, insects, microbes and surface biology specific to mine sites and/or has written articles in mining history / geology publications.



#### Understanding of different mine types

- 1. Candidate has poor knowledge of all mine types.
- 2. Candidate has poor knowledge of mine types not commonly found in candidate's home region.
- 3. Candidate has an acceptable level of knowledge in the common mine types of the UK but lacks in-depth expertise in some areas.
- 4. Candidate has a good level of knowledge in all common mine types of the UK and very good knowledge in at least 2 different mine types.
- 5. Candidate has excellent knowledge in all common mine types in the UK and would be capable of educating others on the subject or has written articles in mining history / geology publications.

#### **Technical Skills**

- 1. The candidate deals with a situation in an unsafe way.
- 2. The candidate can use a skill to deal with a technical situation underground.
- 3. The candidate can use an appropriate skill to deal with a technical situation underground.
- 4. The candidate has a few technical skills available to them and can use the most appropriate skill efficiently after risk assessing the situation.
- **5.** The candidate has a wide variety of technical skills available to them and can use the most appropriate skill quickly and efficiently after risk assessing the situation.

#### Leadership

- 1. Candidate has poor performance in this area and poor judgements. Unsafe.
- 2. Candidate is unsatisfactory or not all criteria complete. Unsafe.
- 3. All criteria covered by candidate but room for improvement in one or more areas.
- 4. All criteria covered by candidate who also demonstrates sound understanding of why certain steps are needed and can justify their actions to others.
- 5. As for good + involvement in cave/mine rescue or teaching leadership & safety underground.