

EIS GENERAL HEALTH AND SAFETY INSPECTION OF THE CARNEGIE ESTATE

Notification to the employer, Carnegie College, of conditions and working practices considered to be unsafe or unhealthy and of arrangements for welfare at work considered to be unsatisfactory.

Copies to: Mr John Buchan, Head of Estates, Heads of School, EIS members, and EIS Branch Office Bearers for distribution to non-EIS members of the academic staff of Carnegie College.

A general inspection was carried out, starting from 2 March 2009, under the auspices of the 'Safety Representatives and Safety Committees Regulations 1997' by the EIS Health and Safety Branch Officer.

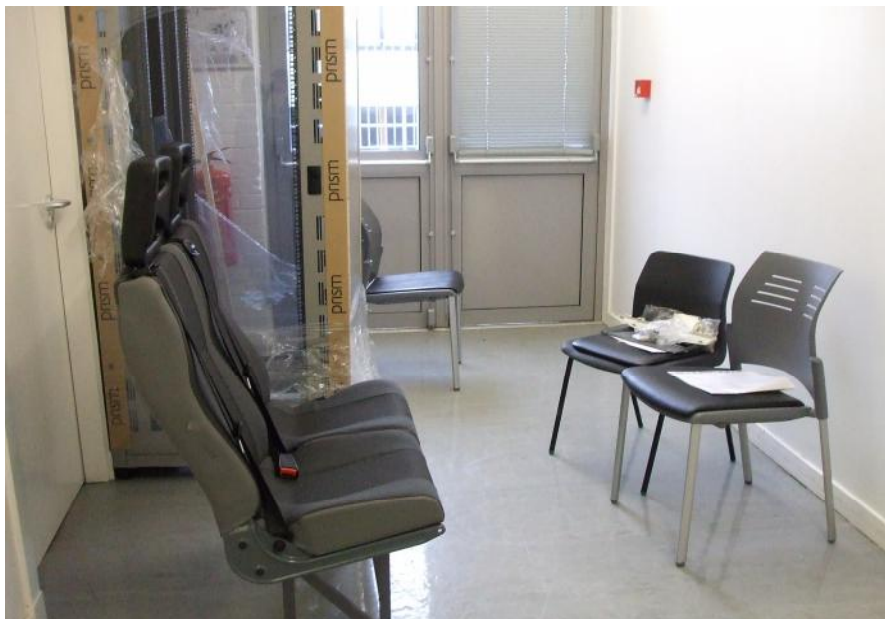
ADVANTEC

The following were noted at Advantec, Halbeath Campus on 2 March 2009.

(Thanks are due to the Halbeath based EIS members who gave up their lunchtime and breaks to report their concerns to the author of this report. As there was no opportunity on the day to inspect outwith break times, only a small part of Halbeath Campus was visited.)

1. Fire hazard at South Gate.

At the South gate the fire door was blocked.
It was blocked by a large metal cabinet, three classroom chairs and seats which had been unloaded from the minibus. (Fire Safety legislation) Please see picture 1.



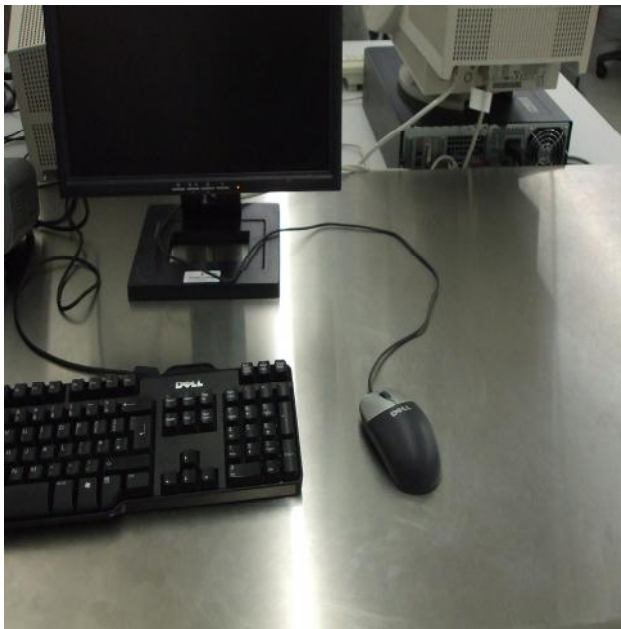
Picture 1

2. The hardware room, Room 117D (previously C in the College plans).

There appears to be no ventilation system fitted in this room which felt airless at the time of the inspection. No means of ensuring the minimum of 8 litres of air per second per person are in evidence. To work in an unventilated room would compromise the health of staff and students; it is particularly unfortunate that the College has converted a store-room into an IT facility, given its additional ventilation requirements. Please see Appendix 1 for information on ventilation requirements. (Building Regulations and Workplace Regulations.)

Flickering, unshielded, fluorescent strip lighting appears very bright. The diffused lights *in situ* are non-operational. The seat height for the work benches do not appear to be ergonomic for adults of average height. (Display Screen Equipment Regulations) There are 31 chairs in the room, which would restrict movement of students in the event of a fire. (Fire safety).

Reflected fluorescent light on to the lecturer's metal desk results in background glare. The appearance of the windowless, airless room with the one exit, metal table and white painted walls resembles a mortuary rather than a classroom. Please see pictures 2 and 3.



Picture 2



Picture 3

Lecturing staff who have been timetabled for long periods in the week in this room, have reported experiencing migraines associated with teaching there. One staff member who uses the room for three hours reported that he has not experienced problems personally. However, when one class of his students was questioned by the lecturer, three students stated that they experience headaches in the afternoon every time they use this room.

The room has materials stored under one workstation. There is also electrical equipment in operation but not attached to a fixed point. The former equipment was balanced on a cardboard box. These both constitute a fire hazard. Please see pictures 4 and 5.



Picture 4



Picture 5

3. Room 117C (labelled differently in College plans).

At the time of the inspection, the fire door was wedged open. (Fire safety). This is perhaps unsurprising as there is also no ventilation system in the windowless room and the fire door is the only opening. Please see Appendix 1.

4. Room 117F

The fire door was blocked by a large quantity of materials making it impossible to get through. Please see picture 6. The door in the corridor was also obstructed. Please see picture 7. (Fire safety)



Picture 6



Picture 7

5. Shower room outside Room 1.17

The air shower/changing room is used as a storage area, and another breakout classroom.

6. Room 1.19

Inadequate ventilation.

This room is windowless and is used by up to 20 students. It was reported that the air conditioner in the room works only occasionally. It started up with difficulty, but failed shortly afterwards, while this inspection was being carried out in the room. It was reported by lecturing staff that the air conditioner has been malfunctioning for four years and the issue has been raised repeatedly in School health and safety meetings. (Workplace Regs).

7. Room 1.20

This room feels airless despite an operating ventilation system. A damp patch is visible on the ceiling. (Workplace Regs).

8. Staff Workroom 1.04

During the inspection, several staff were witnessed using the storage system without locking it first. Once inside, lecturers are not visible to other users who could unwittingly close the storage racks on the prior user. (Please see pictures 7 and 8 showing the latter and what happens if a bucket is left in the storage area and staff close the racking system to access their files.)



Picture 8



Picture 9

Engineering controls, if they could be introduced, would be preferable to relying on busy staff to remember to lock the facility before entering.

9. Room 104a

The room extends 20m from its inner reaches with no alternative fire route out, apart from the classroom door. (Fire safety).

10. Computer keyboards in the classrooms visited are dirty. No system appears to be in operation to wipe keyboards down with anti-bacterial cloths or deep clean at intervals, to remove MRSA and other bacteria. (Workplace Regs).

11. Toilet facilities

Male. There were only two toilet cubicles, and three urinals for all male students in Advantec. No male staff toilets were provided in the area. The nearest staff toilets are at the other end of the building, by the canteen.

Female. There were 5 female toilets for students but no toilets designated for female staff in the vicinity.

12. Systems of communication/evening classes.

Lecturing staff are unaware of a means of communicating with janitorial staff or others via pagers etc. when working in isolated conditions in the evening.

13. The building is insecure in the evenings

Staff reported that several entrances are unmonitored and open to the public while evening classes are in operation. There have been occasions when young people have run along the corridors banging on doors while classes were in progress. No system of cameras, security personnel or personal alarms is in operation to ensure lecturing staff's safety when they leave the building.

ROSYTH ENT

The general inspection continued at Rosyth ENT on 9 March 2009.

The inspection was informed by an EIS meeting held on 16 February 2009 to investigate potential hazards. Many thanks to all the staff who gave up their lunch time to attend that meeting, and who raised further safety and health concerns on the day of the inspection. The lecturing staff show a depth of understanding of health and safety issues which informs their practice in a higher risk environment. However, there were some serious concerns as

detailed below (many of which, lecturers have raised with all levels of College Management without the issues being addressed).

14. Health and Safety Law

The Health and Safety at Work Act poster was displayed at reception. However, there are no details of the name of the (current or previous) EIS Health and Safety Branch Officer on it for staff to contact.

15. Health and Safety Policy

15.1 Competent persons.

Not all 'competent persons' (in health and safety terms) have been trained to the minimum of IOSH 'Managing Safety' award. The EIS Health and Safety Representative was not consulted over the arrangements to appoint these competent persons. (Management Regs and SRSC Regs)

15.2 Risk Assessments

Lecturing staff reported what they consider to be best practice regarding access to risk assessments, when Rosyth was operating in pre-Lauder/Carnegie times. Risk assessments used to be accessible in files at reception and document boxes at the office door of the electrical section, or on the notice board in the Mechanical section etc. This system is no longer in operation.

Some risk assessments are displayed in work areas. However, many are less accessible, being stored on the Assistant Head of School's hard drive. Several risk assessments are of poor quality, e.g. generic only and not taking account of the environment within which a particular machine is operated. No system appears to be in evidence for revisiting the risk assessment when an accident or near miss occurs. Several risk assessments (including generic ones) are signed by unpromoted lecturers untrained in carrying out risk assessments. Others are neither signed nor dated (Management Regulations)

15.3 COSHH

It was reported that the Hazardous Substances Inventory and COSHH assessments were out of date. (COSHH Regs.)

16. First Aid

Staff are concerned at the indirect way in which a First Aider is called, given the number of accidents at Rosyth. Lecturers have to phone reception at present, and a receptionist then calls the First Aider. Lecturers feel an emergency phone, wired through to a First Aider on a beeper would minimise the dangers to staff and students from delay. At present there is only one First

Aider on duty at any one time. If two accidents happen at the same time this would be a problem. (First Aid Regs)

Emergency procedures for spillages and other incidents were not visible at the time of the inspection.

17. Lack of shower facilities

There are no shower facilities in case of workshop accidents with hot work (Fabrication/Welding) or for car mechanics. If a sump plug was damaged and fell out, it could cover a lecturer or student with old engine oil. The lack of an efficient means to wash this off is a hazard. (Workplace Regs and First Aid Regs)

18. Visitors

Visitors have not been reporting to reception to sign in. Representatives of firms who send students for training have virtually free access to the building. Therefore there is no system in place to ensure that correct PPE is issued to such visitors. (PPE Regs).

Staff reported that some visitors have been taking on a health and safety role, telling apprentices (and not necessarily their 'own') to wear PPE. This has the potential to undermine College insurance and is a safety issue, as each firm has a different policy and *ad hoc* advice may not be appropriate.

19. PAT testing

It is unclear to lecturing staff who has the responsibility to carry this out – Estates or contractors. Lecturers feel it is a workload issue if they are expected to carry out such activities themselves, just because they have expertise in that area.

20. School safety meetings cancelled.

Staff reported their concern that School health and safety meetings had been cancelled frequently. (Management Regs)

21. Noise.

Signage for Hearing Protection Zones is good. However, no noise assessments were available from Estates despite several recent requests from the author of this report, and the offer of assisting in conducting these. The earplugs offered to staff are rudimentary and were not available for use in Fabrication and Welding on the day of the inspection.

Lecturing staff are not fitted with individual hearing protection such as noise breakers, available to lecturers in workshop conditions in other FE

establishments. For an example, please see Appendix 2. No regular checks of lecturers' hearing have been made in recent years.

Concern at the level of noise, has been raised by lecturing staff over the last two years, but the difficulty of teaching and supervising students in a noisy and high-risk environment has not been addressed. Some improvement has been made since January 2009 with the increased use of classrooms away from the noise of the workshop. However, these classrooms are sometimes overlooked.

One classroom is designated for 'Electrical' use. However, staff there reported that they needed another classroom (which would avoid the need to lecture in a noisy environment with its attendant risk of vocal loss). Noise increases in the electrical workshop area when trunking, conduit work and work with hacksaws are in progress simultaneously.

The Mechanical workshop has been designated a 'noise protection area'. This is occasionally noisy when more than one pump run together.

The Atlas Copco compressor is sited inside the workshop area of Fabrication/Welding, and this is very noisy. Most such compressors are situated outside of workshop areas in industry. (Noise Regs)

22. Personal Protective Equipment (PPE)

22.1 Risk of injury to eyes.

There is no PPE policy in place at Rosyth ENT to ensure that polycarbonate prescription lenses are available to lecturers who cannot wear the standard issue without loss of vision. The latter is caused by misting up when polycarbonate glasses are worn with lecturers' own spectacles. One lecturer has to take welding glasses off to see a weld specimen or read sizes in a designated eye protection zone. (On the day of the inspection it became apparent that A, C, B, D and E

were in this position, although there may be others.) This issue has been reported as an EIS Hazard Alert by the author of this report.

22.2 Overalls.

There is no system in place for the College to clean lecturing staff's overalls. (A laundry service was offered for a week in this academic year). Neither are there personal lockers with the capacity to hang overalls. (PPE Regs.) E has not been given overalls as PPE.

23. Stress

The lecturing staff clearly operate well as a cohesive team, helping each other out professionally. However, there was a widely reported perception of feeling 'less than valued' by the College. Examples were given of lecturers raising

their safety concerns and the latter not being addressed. (Please see the EIS Accident report of an accident on 21 January 2009 for further detail on this.)

There is no bank of staff available for cover of absences. Neither are there clear lines of responsibility, for example, for stocking materials. There is also a perception of 'penny-pinching' to the extent that lecturers' professionalism is compromised. Many examples were given in Fabrication/Welding and Electrical of lecturers running out of consumables. No welding rods were available on the day of inspection; on other occasions, workshop class teaching has been rendered impossible for lack of grinding discs or acetylene.

Electrical lecturers reported shortages of nuts, bolts, black nylon tie cords and crimps. 'You can't train on thin air', seemed to sum up the general feeling. Also in the Electrical section, kits of resistors and everyday items for apprentices and students are not available in tandem with lecturing notes.

On-going shortages of materials lead to a requirement to cancel the class that a lecturer has prepared for; such events cause frustration and stress in the teacher. This means that a lecturer's preparation time is not always being utilised effectively.

A high proportion of lecturing staff reported that they were taking medication for high blood pressure. No individual risk assessments, to staff's knowledge, has been carried out for this and other medical conditions staff are experiencing (which included DDA scheduled conditions such as depression and mobility impairment - Disability Discrimination Act).

24. Technician support. There was a perception of unclear job descriptions of technicians, and insufficient technician support. This added to the feeling that frustration and stress for the academic staff at Rosyth could be lessened by clearer job descriptions.

25. Staff workrooms

25.1 Computers.

Chairs at computers appear elderly. It was reported that they had been in use since 2000. No DSE risk assessment appeared to have been carried out of the work stations, which (in Fabrication/Welding in particular) are non-ergonomic. (DSE Regs) Please see picture 10. This is compounded by the lack of storage for lecturers' materials and cramped conditions, shown in the same picture. There was a thick layer of dust over equipment in this workroom. Please see picture 11.



Picture 10



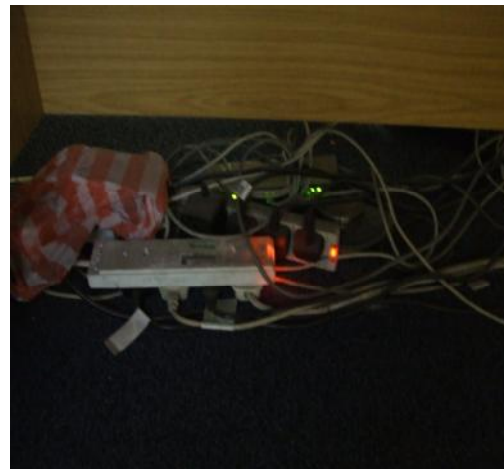
Picture 11

25.2 Fire and trip hazards in fabrication/welding workroom.

The inadequate storage provided, meant that paper materials are stacked on the floor, constituting a fire hazard. Please see picture 12. There was a number of trailing wires under Mr Y's desk, constituting both a fire and trip hazard. (Fire Regs and Workplace Regs). Please see picture 13.



Picture 12



Picture 13

26. Class sizes

Widespread concern, from the Fabrication/Welding to Electrical sections, was expressed about class sizes in August 2008. Excessive numbers (over 14) were reported to have been in operation in this higher risk environment. Some classes were as high as 22 (in Fabrication/Welding) and 24 (in Electrical). This latter class comprised of students using hacksaws, power drills on benches and hand laying materials with sharp edges.

FABRICATION AND WELDING SECTION

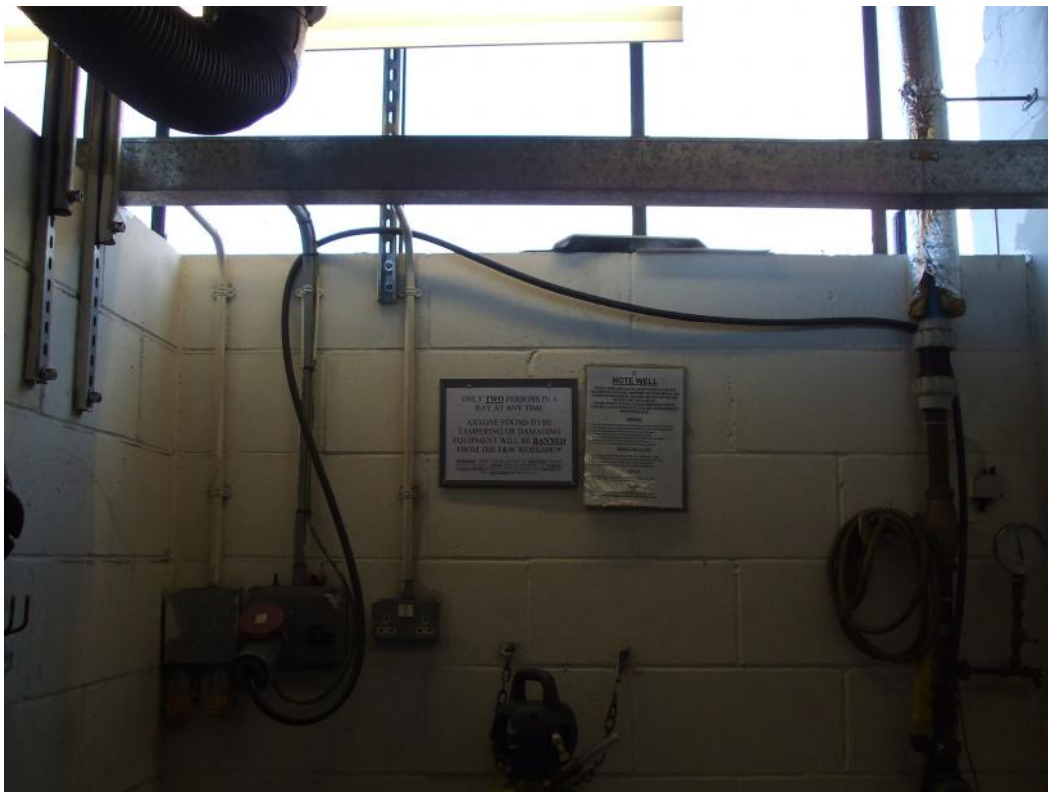
28. Three pin plugs are in operation. (A square pin plug can be knocked out in an emergency).

29. Trip hazards.

Not all welding bays have 240v sockets. Trip hazards are created by the lack of universal sockets when some machines are moved to a working socket. Some 110v sockets do not work.

30. Inadequate lighting.

The welding bays (17-23) are dark as lights are not located centrally. Please see picture 14. Without consultation, the bays were also set up for use by left-handed persons only. The resulting arrangement is non-ergonomic for the majority to use. There is also a greater potential for the hose to be showered with sparks. A plate has been built to cover the hose in recognition of this, but it is still hazardous.



Picture 14

31. Welding machines unsecured.

Welding machines are not padlocked on to wall brackets in the welding bays. (PUWER)

32. Maintenance

There is no record of welding equipment or hydraulic presses being maintained. This is an insurance requirement for the Lloyds Register, and staff have raised this issue repeatedly. Maintenance records and schedules would be a means of lecturers flagging up what requires attention. At present staff report that machines are used until they break down. If someone were to be electrocuted at a machine, no maintenance or record of work would be available to the College. (PUWER)

33. The Guillotine

The shadow line on the guillotine is broken. This increases the potential for injury to a person when operating, as it increases the requirement to re-cut a small amount without the shadow line present for accurate cutting. It also increases the chances of damaging the machine. The electrical cut-out guard at the back of the machine was working at the time of the inspection. (PUWER)

34. Acid Cupboard

The acid cupboard is located in the Fabrication/Welding workshop, where grinders could be used to cut the lock off. It would be safer to locate the cupboard in the store. The cupboard was unlocked at the time of the inspection. There was no date or signature on the laminated risk assessments above the sink and acid cupboard. (COSHH)

35. Walkway

35.1. The walkway runs adjacent to a set of bench drills with the potential for shards to injure the eye of a passer-by. (PUWER) Please see picture 15



Picture 15.

35.2. Walkways were clean. However, cleaners appear to be attending to walkways only, and not including pipes and behind machinery. (One workshop labourer who knew the area, could be designated to sweep up and Hoover as appropriate.)

36. Drilling machines

36.1 There was inadequate guarding of the drilling machines. (PUWER)

36.2 There is no isolator switch on the drills. (Electrical Safety Regs).

37. Gas pipe extraction system

There is a layer of black metallic dust lying above the gas pipes at the extraction system at eye level. This has the potential to cause injury by blowing into eyes, when doors to the workshop are opened, displacing the dust. Please see picture 16.



Picture 15

38. Store-room

The fabrication/welding storeroom was blocked, constituting a trip hazard.

39. Most of the scaffold tags are out of date.

40. Temperature

The temperature in the workshops on the day of inspection was adequate, although this cannot be controlled locally.

41. Fire and noise hazards.

The D block entrance door to Fabrication and Welding was sticking at the time of the inspection (due to grit on the floor). This produced both a fire and noise leakage hazard. (Fire safety and Noise Regs).

MECHANICAL SECTION

42. The powder fire extinguisher

The powder fire extinguisher outside Staff Workroom 2 (Mechanical) has a maintenance record showing October 2006. (Fire Safety Regs) Please see picture 16.



Picture 16



Picture 17

43. Manual handling

The new maintenance and repair pipe and pump rig in the mechanical workshop requires a slinging beam to avoid manual handling. Please see picture 17 above. At present, staff are using a forklift truck and engine lift (hand operated). However, these are not enough to reach over the safety railing. Therefore, lecturers have to apply physical force in awkward positions. The only risk assessment is of the rig, not of the manual handling operation *in situ*, nor of the individual lecturer with medical issues.

ELECTRICAL SECTION

44.The layout of the electrical workshop.

At the time of the inspection, disparate groups of students were being taught behind dividing walls, but they constituted one class for the lecturer to teach. Because students are often spread out in two areas, this compromises a lecturer's ability to supervise the students when the latter are learning electrical hand skills and cutting with hacksaws.

45. Trip hazards

45.1 It was reported by staff that with a new electrical technician in post, trip hazards in the stores are less prevalent. However, at the time of the inspection, trip hazards were in evidence in the stores. Please see pictures.18 and 19.



Picture 18



Picture 19

45.2 Area 5 had a mobile stairway and boxes left on the floor. Please see picture 20. (Workplace Regs.)



Picture 20

46. Lack of maintenance

A vice at the bench in Area 5 is non-functional.

47. Lack of safe system.

The Hilmor conduit bending machine is in operation without a safe system of work. If it is moved from the storage area by the back door, to Area 2, without a key to keep the hand in place, or if it is used while unpinned, it is capable of fracturing a kneecap or shin bone.

48. Outside areas

48.1 Fire hazard.

The yard outside the fire exits is littered with unwanted scrap and pallets, etc. (Please see pictures 21 and 22). The rubbish around the campus constitutes a fire hazard. There do not appear to be clear lines of responsibility for clearing this area up.



Picture 21



Picture 22

48.2 Risk of traffic accidents.

Staff and students are not kept separate from moving traffic around the building. Please see picture 23. (The front of the building was subsequently marked for pedestrians after an EIS hazard alert was submitted by the author of this report, following a visit by the author of this report). However, there are no designated walkways at the back of the building, and road-crossing points are not provided. (A student has subsequently been injured by a vehicle in this area.) Roads are not in good condition and lighting at the sides and back of the building is inadequate.



Picture 23

COWDENBEATH

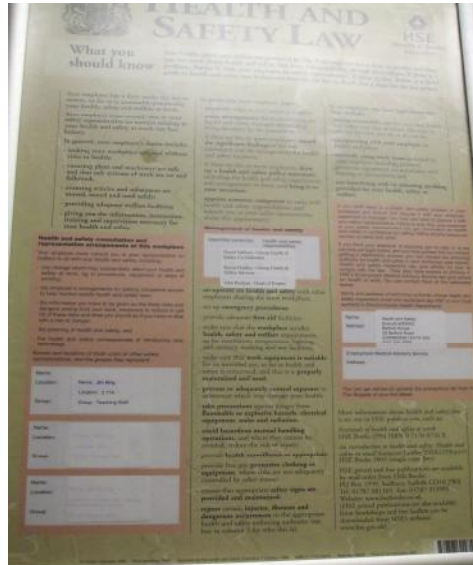
The general inspection continued at Cowdenbeath on 30 March 2009.

Many thanks are owed for the helpfulness of the staff (academic, administrative and technician) present on the day, and to the staff who discussed their safety concerns and showed me around the building.

There was much evidence of good health and safety practice on the site. Where accidents had happened previously, lessons had been learned. For example, when students had brought in bow saws resulting in a student being injured and taken to hospital, bow saws are now banned.

49. Health and Safety Law.

The laminated Health and Safety Law poster was on display. Unfortunately, it had not been updated by the College to inform academic staff who their Health and Safety Representative was, from the EIS AGM in January 2009. Please see picture 24.



Picture 24

49. First Aid

There was a well-stocked first aid box. However, first aid facilities were cramped, occupying a desk in a small corner of a room where boxes were stored, constituting a trip hazard. (First Aid Regs.). Please see picture 25 and 26. There had been an occasion on 20 September 2007, when three students had been injured carrying out different tasks/activities (one outside the building), and all arrived for first aid treatment within five minutes of each other. Each injury resulted in the students being taken to hospital. At the time of the inspection there was only one first aider, so no cover is possible. However, a part-time classroom assistant will be available as a first aider shortly.



Picture 25



Picture 26

50. No shower facilities.

There is no shower available to staff or students on site. This is regrettable, as the sand and hydrated lime mix used for classes is alkaline, which burns if it comes into contact with skin. It would therefore require to be quickly washed off.

51. PPE

51.1. Since the wearing of gloves was introduced in 2007, staff reported that safety has improved.

51.2. Personal and protective equipment not personal.

Mr W has not been issued with appropriate prescription polycarbonate glasses as PPE. His own glasses mist up when wearing the standard issue PPE over his spectacles. No personal risk assessment appeared to have been carried out for Mr W's PPE requirements.

51.3 Overalls not cleaned by College.

Overalls for students are laundered by the School of Access and Communities. However, lecturers' overalls are not included in this service. (PPE Regs)

52. Toilets

52.1 The male toilet has a broken floor surface making it difficult to keep clean. (Workplace Regs) Please see picture 27.



Picture 27



Picture 28

52.2 The disabled toilet has a hole in the door stuffed with toilet paper. Please see picture 28 above. (Dignity at Work and Workplace Regs).

53. Walkways

Walkways and work areas were tidy at the time of the inspection and safety signage was good.

54. Stores

The stores were very tidy at the time of the inspection. However, a plastic bottle of chemical cleaner have been left on a lower shelf by a previous cleaning firm. Instructions on the label indicate that if the substance comes into contact with a person's eyes, they must rinse for 15 minutes and seek medical help immediately. As the product is not in use but is hazardous, it may be worth considering safety disposing of it. (COSHH Regs). (Please see pictures 28 and 30)



Picture 29



Picture 30

55. Water cooler

It was unclear when the water cooler was last serviced.

56. Catering facilities

Catering facilities on site are very basic. The underneath inside of the sink was dirty at the time of inspection. (Workplace Regs) Please see picture 31. Cardboard and other materials were stored next to the sink, making the floor difficult to clean. Please see picture 32.



Picture 31



Picture 32

57. Classroom located outside main building

57.1. Fire safety.

This classroom has barred windows but is not covered by the fire alarm operating in the main building. (Fire Safety)

57.2 PAT Testing.

The Kenwood oven (used for dried and wet brick testing) has not been PAT tested. (Electrical Regs)

57.3. Potential eye injury.

The Epsom Smart board Projector was not ceiling mounted. The bright light coming from a low angle could potentially cause problems if shining directly into someone's eyes.

57.4 Computer use.

The chair for the staff member's use at the computer is non-adjustable. (DSE Regs.) There were also loose wires underneath, a potential trip hazard. (Workplace Regs) Please see picture 33.



Picture 33

58. Outside area

58.1. Fire and trip hazards

The backyard was untidy, constituting fire and trip hazards. Please see picture 34. Staff reported that the outside area had recently been treated to reduce the number of rats that had been seen there. However, unless cleared, it would be an environment where vermin would flourish.



Picture 34

58.2 Fire hazard.

Staff reported that they could not hear the fire alarm when the Pan Mill mixer was in operation.

HALBEATH CAMPUS

The general inspection resumed briefly at Halbeath Campus on 30 March 2009 in the afternoon.

59. Canteen.

A quantity of seating was piled above head height in a corner of the canteen at the time of the inspection. Please see picture 35. This is an unstable arrangement and could easily be dislodged, so that heavy seating falls onto staff or students sitting in the adjacent chairs, potentially causing injury. Please see picture 35.



Picture 35

(This report does not imply that the conditions are safe and healthy or that the arrangements for welfare at work are satisfactory in all other aspects.)

Legislation covering this report includes:

'The Health and Safety at Work Act 1974', 'The Safety Representatives' and Safety Committees' Regulations 1977', 'The Fire Safety (Scotland) Regulations 2006', 'The Health and Safety (Display Screen Equipment) Regulations 1992', 'The Workplace (Health, Safety and Welfare) Regulations 1992', 'The Management of Health and Safety at Work Regulations 1999', 'The Electricity at Work Regulations, 1989', 'The Control of Noise at Work Regulations, 2005', 'The Provision and Use of Work Equipment Regulations, 1998', 'The Control of Substances Hazardous to Health Regulations 2002', 'The Personal Protective Equipment at Work Regulations 1992', 'The Disability Discrimination Act, 1995'.

Signed : EIS Branch Health and Safety Officer, Penny Gower:

Signature *Penny Gower*

Date: *2nd April 2009*

Record of receipt of form by the Employer, Carnegie College (or his representative).

Signature: _____

Date: _____

Record of receipt of form by the Head of Carnegie College Estates (or his representative).

Signature: _____

Date: _____

Please see over the page.

(This section to be completed by the employer)

Remedial action taken (with date) or explanation if not taken. This information would be gratefully received by the EIS Branch Health and Safety Officer, Ms Penny Gower and the EIS Branch Depute Health and Safety Officer, Mr Jim Wilson.