## **Pitstone Green Museum**

## **GUIDANCE NOTES for VOLUNTEER STAFF including FIRE & EMERGENCY PROCEDURES**

## NOTE

For the purposes of this document, a Competent Person is defined as one who has developed a working knowledge of the particular equipment and its use on the museum site by dint of experience and /or previous professional practice.

**Preface** This document attempts to predict occurrences on the Museum site which could, or would, present a danger or hazard to people on site at the time, or in the future, whether they be voluntary staff, or admitted members of the public, or indeed unauthorised intruders. It also attempts to issue guidance to voluntary staff as to how they should act in these circumstances.

In the following pages locations on the museum site will be referred to by the names commonly understood by a majority of the museum's voluntary staff. It is regarded as being <u>absolutely essential</u> that <u>all voluntary staff</u> make themselves familiar with the site and the common usage name for each location on the site, so that in any emergency they can react promptly, appropriately, and reliably.

We consider the greatest risk on the Museum site to be Fire and our assessment of this risk is covered in 1. below. We then move on to consider other catastrophes which do not involve fire but which present hazardous situations to anyone present on site

- 1.Fire \_\_\_ The best way to guard against fire is to make sure that there is nothing capable of burning in any location and also that there is nothing capable of igniting it. But we live in a practical world and much of the museum itself is highly combustible, and we have many things which, if incorrectly utilised, could start a fire. Therefore we must take care to minimise the risk of a fire starting. Only competent persons should use equipment located on the museum site, and any person in doubt as to competency or method of use must seek advice from their senior manager before starting a task. The first three sections following are intended as guidance regarding things to do, and things not to do. The last two sections are concerned with what to do if a fire does start, or other emergencies occur.
- 1.1 Fire hazards A fire needs combustible or inflammable material to burn. It also needs oxygen for the burning, once started, to continue. And finally it needs something to happen to start the fire. If despite all the precautions below we are asking you to take we are unfortunate enough to suffer a fire at the museum there are three possible scenarios; the museum is staffed only by volunteer workers; the public is present in the museum with one or more volunteers in charge of them; or there is no authorised person on site.
- 1.1.(a) <u>Combustible materials.</u> The whole site shows a proliferation of combustible materials, e.g. paper, wood, plastics, etc. Indeed many of the artefacts which are on show to the public on open days and which are fundamental to our very existence are highly combustible. But most of the artefacts are on show well away from any source of ignition, and this is one of the reasons why we actively support the law banning smoking in public places so as not to introduce potential ignition sources anywhere on site.

Away from the exhibit areas, for instance in the workshops, we must be tidy. We must not leave piles of easily combustible materials where our work could produce sparks, or flames, or pieces of hot metal, and we must always be on our guard against starting even a tiny fire as a result of our work or that of our colleagues.

Additional hazards close to our site in the summer months can be the presence of ripe crops nearing harvest time (including allotment produce) and we must not light fires without checking first that there is absolutely no chance of a spark carrying into such dry materials.

- 1.1. (b) <u>Inflammable materials</u>. There is a small building set aside for the storage of inflammable materials and all such materials must be kept in there when not actually being used by the voluntary staff. These materials include all solvent based paints (not emulsion paints), releasing fluids (WD40), cans of spray paint, containers of thinners (cellulose or industrial thinners and white spirit) or industrial solvents, methylated spirit, petrol, paraffin, and aerosol cans of any sort. This building is the Fuel & Paint Store. Containers of flammable gas such as propane are not to be stored in this building. These should be stored in, or adjacent to, the cage at the north end of the cart sheds when not being used.
- 1.2. <u>Sources of oxygen</u>. The air around us is the main source of oxygen, and there is nothing we can do to exclude it from our combustible or inflammable materials. There are no other sources of oxygen kept on site. Due to the nature of our buildings, many of which are listed, it is not feasible to fit fire-proof doors or windows which could form an obstruction to air (oxygen) feeding an existing fire.

- 1.3. <u>Sources of ignition</u>. These can be categorised as naked flame, sparks or arcs from electrical processes, incandescent metal produced in various metal-working processes, and various hot processes.
- 1.3(a) Naked Flame. Flames can be used in several ways around the museum site; eg the blacksmith's forge, soldering or brazing of metals, lead burning or melting, starting/running hot bulb/tube engines and paint stripping. These tasks should only be carried out by competent persons or those undergoing instruction by a competent person. A competent person will take note of the fire risks in his area of work and will act and dress accordingly. The most likely everyday source of naked flame is at the incinerator site. This has been located well away from potential hazards, though it should be regarded as a matter of good practice that no burning material should be left unattended here and that all volunteers involved should be absolutely sure that any such fire is extinguished before leaving the museum site.
- 1.3(b) <u>Electrical</u> Arc welding, (mma and mig,) is often used on site and should only be done by competent persons who are aware of the fire risks and will act and dress appropriately. Faulty electrical equipment can produce sparks and anyone noticing such sparks must ensure that such equipment is immediately switched off and disabled for further use until repaired. Electrical faults, or suspected faults, must be reported to management by the speediest method available.
- 1.3(c) <u>Incandescent metal</u>. Processes which can produce incandescent metal, such as grinding or using metal-working machine tools with high speed cutters, should only be carried out by competent persons or those undergoing instruction by a competent person. A competent person will take note of the fire risks in his area of work and will act and dress accordingly.
- 1.3(d) <u>Hot processes</u>. Processes which produce heat without flame or sparks, such as soft soldering with a soldering iron or use of a hot air gun should only be carried out by competent persons or those undergoing instruction by a competent person. A competent person will take note of the fire risks in his area of work and will act and dress accordingly.

## 1.4. Fire.

- If a fire starts, the first duty of the person discovering the fire is to notify anyone in the near vicinity and advise them to evacuate the area.
- He/she should then take steps to ensure that the senior manager present on site is informed. [Occasionally both the
  manager and deputy manager may not be on site and the senior person present must assume the role of acting
  manager in the case of a fire or other emergency occurring. Normally the keyholder who has opened the museum or
  who has been designated to close it will assume this role].
- An objective view of the fire (or other emergency) must be taken by the senior manager who will decide if extinguishing it by those present is feasible.
- If there is any doubt at all about this the Fire Brigade must be called by the quickest available method.
- The safety of all persons present must be paramount and take precedence over the safeguarding of all objects, artefacts, buildings or other property.
- When the public are present on site and a fire starts, the public must be evacuated to a place of safety as a priority.
- Due to the nature of the museum site it is not possible to designate a single assembly area to which the public should be evacuated in all circumstances but the three most generally suitable are the Chicken Yard, the Rickyard, or the Orchard and normally one or more of these locations will suit
- The public must not be allowed to move from their evacuation area until a senior fire officer or the manager in charge signifies that it is safe to do so.
- <u>2. Other emergencies</u> such as flood, explosion, collapse of building, aircraft crash etc must be treated in much the same manner as a fire. Throughout, common sense should prevail and the prime objective of all museum staff must be regarded as ensuring the safety of all persons present.
- 2.1. Flooding anywhere indoors on site is considered to be very unlikely. Two locations are known to flood to a very shallow depth during prolonged torrential rain. These are the Fan Room and the Concrete Workshop, but no damage will be caused and the water will disappear naturally. However, such flooding in the fan room introduces an additional hazard. The fan room contains electrical switchgear, fuses and meters, but none of these is likely to be affected by the water due to the height at which they are fixed above ground level. By standing in shallow water whilst operating electrical gear the severity of any electric shock received could be drastically increased. For this reason there should be no attempt made to operate any switches or repair any fuses in the fan room if surface water is present. The one exception to this rule could be if emergency services declare that it is essential that electricity to the site is switched off, in which case the site main switch (see section 6) can be turned to the "off" position, and left there until some competent person deems it safe to switch on again.
- <u>2.2. Explosion</u> could occur if there was a gas leak into the Crossley Gas Engine Room to form a mixture with air in certain proportions and a source of ignition was present. The gas to the engine has to pass through three isolating valves in turn before it gets to the engine. Two of these valves are outside in open air and these should never be operated without a competent

person being present. The third valve is opened immediately before starting the engine and closing it is the method of stopping the engine. The engine should only ever be run when the double doors to the engine room are wide open so as to give good ventilation and when it is running no sources of ignition should be allowed inside the room.

- 3. Hazards. The Museum site consists of a number of old buildings with very uneven floors, steps and inclines. These present a considerable hazard of tripping or falling. Care must be taken when moving around the site in particular when carrying or moving objects. The roofs are covered in a variety of materials so access on to the roofs for maintenance must only be carried out by competent persons under the supervision of an experienced Supervisor.
- **4. Machinery**. The site workshops include many machines the operation of which could be considered hazardous plus there are a number of tractors and other motorised equipment around the site. Separate instructions are issued for the use of such equipment and are available to all volunteers.
- <u>5. Services.</u> The museum receives both water and electricity from off site sources and it may be sometimes necessary to isolate these supplies.
- 5.1. Water, in part, comes from the farmhouse, and there is a stop cock inside the farmhouse. The supply pipe travels underground through the Chicken Yard to a metal lidded chamber situated in the crazy-paved area outside the Crossley Gas Engine room. If the lid is lifted three stop cocks and a water-meter will be seen. The site main stop cock is the one with the perforated red metal handle situated towards the farmhouse end of the chamber. Turning the handle clockwise will turn off the water to the whole site. It should be noted that due to a high water table in this area it can happen in wet weather that there is a high level of water within the chamber which may cover the stop cocks. (*The provision of water supply is currently undergoing reconsideration and an addenda to this set of notes will be issued in due course when this matter has been resolved*).
- 5.1. Electricity\_arrives on the site from the north via overhead wires supported by poles. These wires terminate in the supply company's fuses mounted on a cement-asbestos sheet on the west wall inside the Fan Room. Access to the Fan Room is via a sliding door on the north wall which is padlocked and can be opened using the museum standard works key. Step inside the room, turn right, take two paces forward and turn right again, and you will be faced with a large black box fixed to the wall with a chromium-plated handle towards the lower left of the front panel of this box. This box is labelled "MAIN ISOLATOR". To turn off the electricity supply to the whole site turn this handle through 90 degrees in a clockwise direction; note that this operation takes considerable strength. If you have sufficient light you may see that part of the handle mechanism at first indicated "ON" with a red background, and after turning the handle it should indicate "OFF" with a green background. Please also note that by operating this switch all freezers and refrigerators on site will be off and, unless precautions have been taken, the site security alarm will start to sound inside the farmhouse.

There is plan on the west wall within the Fan Room which shows the function of the multiple electrical fittings on the walls. Only if you are confidant that you understand what you are doing should you interfere with any of these fittings. All these fittings should be safe to touch after turning the Main Isolator to off, but absolute safety is only achieved by opening the Main Isolator box and disconnecting the "Neutral Link". Do not do this unless you are competent to do so.

**6.** <u>Access.</u> Reception is a visitor's first point of call. It is also the site of the museum's letterbox, the site toilets, the security alarm controls, and the site keybox. To gain entry to any part of the museum it is first necessary to enter reception and turn off the security alarm. The padlock fitted to the reception door has around a dozen keys issued to keyholders named in the keyholders register. Keys are held by the Chairman of the Society, the Secretary, the Museum Manager, the Museum Deputy-Manager, the Business Manager, the Site Manager, the Catering Manager, the Programme Secretary, one trustee and two society members. The Hawkins family also have a key in the farmhouse for use in emergencies.

Generally the whole site is accessible by using one or other of two keys called the standard key, and the standard works key, and one of each of these is to be found in the keybox. The laminated steel bodied padlocks are fitted to gates and to doors to rooms containing artefacts and which need to be opened when the museum is open to the public; a standard key will open all of these. The brass bodied padlocks are fitted to doors to stores and workshops which are used by volunteer workers; the standard works key will open all of these.

There are exceptions to the above rule.

- a. The Catering Room, when complete, will have a dedicated key in the keybox
- b. The office has a dedicated key in the keybox
- c. The Grain Barn key is in the keybox
- d. The Science & Radio room is opened by the first named standard key, but there is an additional padlock to this door, keys to which are held by the Museum Manager and the Business Manager, but none in the keybox.

Other keys in the keybox are for various cupboards, display cases, equipment, etc as described on the key list below the keybox