# 2.0 Health and Safety and Environmental Procedures



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**Audience:** This section will be of interest to all potential audiences, although it is of particular interest to organisations directly involved in the treatment of WFFF.

**Benefits:** The benefits of implementing any of the highlighted good practice are improved health and safety (H&S) of staff and reduced risk from potential hazards. It also helps identify ways to limit the impact that treatment facilities can have on the environment.

**Summary:** This section of the guidance advises on setting up systems and procedures for the early identification of risks to the environment and H&S in order to implement mitigation actions. It also advises on staff responsibilities and training.

## Key benefit of taking action

Due to the potential hazards involved in treating WEEE, Health and Safety of staff should be treated as a priority. Safe Operating Procedures (SOPs) should be implemented to ensure safe working procedures for staff have been identified and assessed.

# 2.1 Health and Safety (H&S) policies and procedures

Operators of Waste Electrical and Electronic Equipment (WEEE) treatment facilities should seek guidance on health and safety (H&S) matters from the Health and Safety Executive at: www.hse.gov.uk

Treatment facilities have a duty to ensure the health and safety of their employees. They should ensure that risks are minimised by implementing controls that prevent employee exposure to identified risks. The treatment of WEEE has the potential to expose workers to a number of risks ranging from risk of lacerations to fire and explosion. More detailed information on hazardous WEEE and appropriate treatment is provided by Defra in two reports which can be found **here** and **here** or visit **www.defra.gov.uk** 

In order to ensure that they provide a safe working environment and comply with all relevant H&S legislation, treatment facilities typically implement a number of policies and procedures, which include:

- Health & Safety Policy;
- Staff Training; and
- Risk Assessments;
- Emergency Procedures.

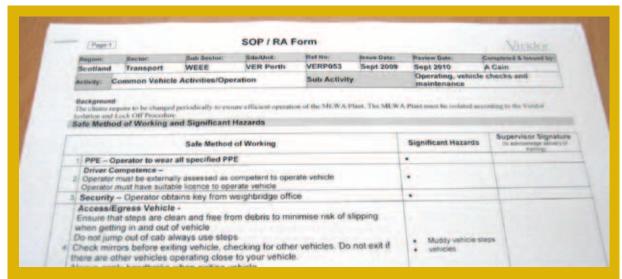
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## **Good practice**

Activities which are considered good practice H&S when treating WEEE include:

- implementing Safe Operating Plans (SOPs) before staff are permitted to perform any task. SOPs should be based on risk assessments and method statements. Their purpose is to ensure that there are systems in place to enable staff to perform their work in a safe manner. The benefits of this are that it sets out clear procedures for staff to follow to ensure their safety. It also identifies training requirements for staff;
- implementing monitoring systems as early as possible for identifying potentially hazardous items. The treatment facility should document the identification of potentially hazardous items and report back to the source to help reduce the risk of this happening in future. This benefits the facility by reducing the likelihood of staff exposure to the risk by identifying and removing it at the earliest opportunity. See *Collections at Designated Collection Facilities section 3.4* of the collection guide for managing contamination at DCF sites. Potentially hazardous items include:
  - grass cuttings within a lawn mower;
  - petrol powered equipment (lawn mowers, strimmers, saws etc);
  - vacuum bags within vacuum cleaners;
  - cooking oil within deep fat fryers;
  - food stuffs or other wastes within fridges and freezers.
- implementing H&S emergency procedures to help reduce the impact of an emergency situation. Existing and new staff should be trained in emergency procedures, which should be regularly practiced to ensure that they know exactly what they must do in the event of an emergency;
- appointing a member of staff to be H&S manager or officer where it is their function to ensure the organisation is compliant with all relevant H&S legislation. They should also be responsible for ensuring that all H&S policies and procedures are implemented correctly and that any deviations from the policy are reported to company management;
- liaising directly between the treatment facility and source (such as a DCF), to ensure that prevention measures for potential H&S risks (i.e. contamination) are implemented as early as possible. This benefits both organisations by strengthening the working relationship with the aim of reducing H&S risks to staff;
- having an acceptance criteria document, which outlines all risks, contamination issues and remediation protocol. The benefit of this is that it allows for a documented procedure which all staff can refer to to ensure they know what to do if they identify contaminants; and
- arranging 'exchange visits' between the treatment facility and the source (such as a DCF). This will educate both parties as to the H&S concerns each faces and help them identify ways to mitigate any H&S risks.

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## **EXAMPLE:**

# Viridor: H&S Systems & Training

Viridor takes the health and safety of their staff very seriously and is pursuing a number of occupational health and safety initiatives. They have particularly focused in the following areas: reducing slip, trip and fall type accidents; continuing improvements in transport management; reducing vehicle and personnel interface; and improving manual handling performance. Accreditation to the OHSAS 18001 international health and safety standard has been achieved across all sites with the exception of two electrical recycling sites which are planned to be certified by the end of this year<sup>1</sup>.

They undertake risk assessments at all points in the handling and treatment of WEEE. They aim to identify and minimise risk at the earliest opportunity by producing method statements and introducing Safe Operating Practices (SOPs) as shown in the figure below.

Viridor SOPs are provided for each activity and provide details of safe methods of working and significant hazards. Both the supervisor and employee must sign the SOP to confirm adequate training has been provided where necessary.

Members of staff are trained and given practical demonstrations on how they should operate in a safe working manner to perform their job, which is detailed in the SOPs. Following this training, each member of staff is then required to sign the SOP along with the trainer to prove they have received training. This simple but effective procedure can be replicated across all treatment facilities to promote safe working practices in the workplace.

They also have a dedicated H&S manager to oversee the H&S proceedings at each of their facilities.

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<sup>1</sup> Available at: www.pennon-group.co.uk



#### 2.1.1 Risk assessments

In order for treatment facilities to manage the health and safety of their employees they have to identify, evaluate and manage any potential risks. The principal way treatment facilities do this is by performing risk assessments.

Risk assessments include examining all points of the treatment process to identify where risks might arise. The main stages of a risk assessment include:

- risk identification: identifying risks and how they may arise;
- risk profiling: assessing the likelihood and impact of any risk; and
- risk minimisation: identifying how risks can be mitigated to ensure the H&S of employees.

Treatment facilities typically perform risk assessments and implement systems for mitigating the risks. Mitigation procedures often can include H&S policies, H&S training, signage and the provision of personal protective equipment (PPE).

## Key benefit of taking action

There are a number of items which can be potentially dangerous if included in the Small Mixed WEEE (SMW) stream. Petrol powered equipment, loose portable batteries, gas cylinders and aerosol cans should be removed from SMW as they can pose an explosion hazard during transportation and at treatment facilities. By implementing good practice activities risks can be minimised.

## **Good practice**

Examples of good practice for risk assessments include, but are not limited to:

- performing risk assessments at the earliest possible opportunity, typically at the first potential point of contact where the treatment process begins (which may be the collection of WEEE). By ensuring risk assessments are performed at the earliest possible stage, the treatment facility can implement appropriate mitigation measures at the relevant stages along the process line;
- implementing a process for the identification, and subsequent safe handling, of items considered hazardous or constituting a hazard. These items should then be put in a suitable container, clearly marked and stored until they are disposed of or sent for further treatment;
- implementing mitigation measures such as training, PPE, signage, designated marked walkways, barriers and procedures when risks are identified. Seeking advice and guidance from the Health and Safety Executive can help reduce risks and improve mitigation techniques. The benefits of this are that policies and procedures can be reviewed by an external body with extensive knowledge of the subject;



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- training staff on the identification and safe handling of items such as batteries, gas cylinders, sharps and syringes. The identification of these items should (where appropriate) be recorded and reported back to the source to raise their awareness of these issues for the future, and to help them implement measures for ensuring staff safety; and
- providing a spills kit and training staff on how to identify and mitigate risks from a potentially hazardous spill. This ensures that several staff can remove the risk, and reduces the chances of there being no one on site with the relevant training.

### 2.1.2 Staff training

Staff awareness and training is an integral part of any H&S policy and procedure at a WEEE treatment facility.

Due to the potentially hazardous nature of the materials being handled and processed, hazards can arise at many points along the treatment line from simple manual handling (i.e. poor lifting techniques), to trip hazards from trailing cables, and needle stick injuries. Hazards can arise from unloading WEEE from poorly stacked vehicles, cages or containers. Hazards can also come from inhalation of toxins contained within items such as fluorescent tubes. Larger scale hazards can arise from items such as gas cylinders, petrol lawnmowers or loose batteries, which can have the potential to cause a fire or explosion.

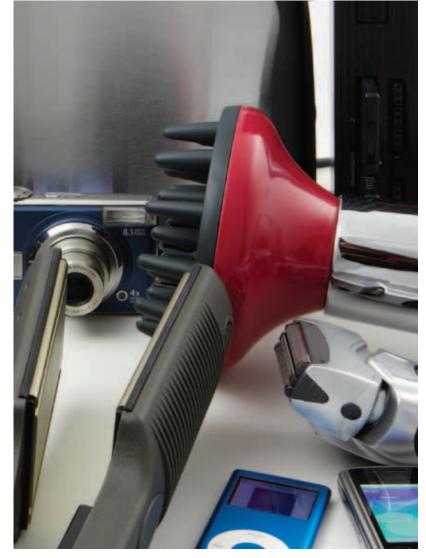
Treatment facilities typically provide some form of H&S training for staff to ensure their safety and provide a safe working environment.

Guidance produced by The Chartered Institute of Wastes Management (CIWM) and National Household Hazardous Waste Forum regarding training for staff coming into contact with hazardous waste (The Hazardous Waste Guide<sup>2</sup>) states that:

'The Environmental Permitting (England and Wales) Regulations 2007, the Pollution Prevention and Control (Scotland) Regulations 2000 and the Pollution Prevention and Control Regulations (Northern Ireland) 2003 require that operators of relevant waste activities are competent to hold an environmental permit.'

An important element of staff training is the technical competence of staff. Operators are required to demonstrate technical competence through an approved industry scheme. It is recommended that all on-site supervisors and operatives should hold a Level 2 NVQ which requires that they demonstrate competence in areas including H&S measures, emergency procedures and team working, (e.g. NVQ Waste Management Operations Level 2 or NVQ Recycling Operations). It is suggested that, to ensure good practice, the following are considered:

the technically competent person for relevant sites holds a Level 4 Certificate on Technical Competence (CoTC) in Waste Management Operations (when applicable): Managing Transfer of Hazardous Waste; and



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all on-site supervisors and operatives hold an appropriate NVQ (e.g. Waste Management Operations Level 2 or Recycling Operations Level 2): basic in-house training on the procedures for acceptance and storage of hazardous waste is developed and regularly reviewed.

Treatment facilities must provide their staff with appropriate personal protective equipment (PPE), which may include: high-visibility vests, hard hats, gloves, eye goggles and ear protectors, and will also usually provide some form of training on how to use them. Washing facilities should also be provided.

#### **Good practice**

Examples of procedures and activities considered to be good practice in H&S training include:

- giving practical demonstrations to show staff how they should perform a task in a safe manner. Employees can often better remember what to do when they've received practical training and demonstrations rather than being trained via more traditional methods such as lectures, videos or manuals:
- providing staff with cards or other suitable aids to remind them how to perform particular tasks or identify and handle hazardous items. This can be in the form of a series of cards on a chain which staff must carry at all times. The benefit of this is that it ensures staff have a reference point to hand for reminding them of their duties and what to do if they encounter risks;
- providing staff with safety training, in terms of what to do if they encounter potentially hazardous items such as gas cylinders, sharps or spillages on site. They must also be trained to report hazardous incidents to their line manager to ensure that they are appropriately recorded. The benefit of this is that it puts in place measures for the identification and mitigation of hazardous items and ensures staff know what to do. It also allows for incident monitoring which enables the facility to implement measures to reduce the likelihood of this reoccurring in the future;
- providing clear, concise and understandable signage such that all staff are reminded of H&S requirements at the relevant sections of the treatment process;
- ensuring that treatment facility staff know how to operate equipment correctly, with formal training being provided where necessary. Equipment which is easy to understand should be used such as button-operated equipment, rather than touch screen panel operated, which can be complicated and confusing;
- implementing spot checks and enforcement measures to ensure staff are adhering to the organisation's H&S requirements. These may include enforcement measures such as verbal or written warnings to enforce staff safety; and
- ensuring all visitors are aware of their H&S responsibilities when entering the site by providing them with H&S instructions before allowing access. Visitor personal protective equipment (PPE) should also be provided and, where necessary, visitors should be trained on how to use it correctly. This benefits the organisation by ensuring the safety of visitors who may not be familiar with the operational processes (and associated risks) on site.

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# **EXAMPLE:**

# MDJ Light Brothers: Enforcement of H&S Systems

MDJ Light Brothers are an AATF and AE which treats all categories of WEEE excluding gas discharge lamps. They also do a small amount of whole WEEE reuse and have three facilities located in Sussex, Kent and Northamptonshire.

They believe that providing their staff with rigorous H&S training and all necessary PPE is still not enough to ensure staff safety. They also provide clear and easy to understand signage at all relevant areas of their facility.

They implement a strict policy of undertaking spot checks to ensure safety requirements and standards are being adhered to and, when necessary, use enforcement measures such as verbal or written warnings to maintain standards.

With their staff working in a potentially hazardous environment treating WEEE, this policy helps the company ensure that they are providing their staff with a safe working environment and that the responsibility for their safety is shared. Staff wear suitable PPE including gloves, steel toe-capped boots, ear defenders and eye protectors in all operational areas.

These policies are a simple but effective way to ensure staff are adhering to the H&S requirements of the organisation. These policies can be easily replicated at other treatment facilities.

They have also invested in equipment which improves health and safety on site, for example, the new installation of a high powered air extraction system for removing phosphorus dusts and other potentially hazardous airborne particles from the working environment.

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## 2.2 Environmental policies and procedures

In addition to having a waste management license or permit, in common with other waste organisations, most WEEE treatment facilities have some form of environmental policy or procedure in place. A policy of this nature reflects the organisation's commitment to ensuring their operation is done at minimal impact to the environment.

Typically a treatment facility will perform an environmental risk assessment where necessary to assess their impact on the environment and will implement appropriate mitigation measures if necessary. Staff will usually receive training on environmental policies and procedures as part of their overall training.

### **Good practice**

Examples of good practice which could be considered for environmental training include, but are not limited to:

- training staff to ensure they operate in a way that limits their impact on surrounding neighbourhoods. This can include operating any noisy equipment when neighbours are likely to be at work or ensuring all emissions are controlled;
- training staff to use transportation routes which avoid high congestion times, organising shifts to allow this and avoiding unnecessary emissions to the environment from vehicles standing stationary for long periods of time; and
- inviting neighbouring businesses and residents to the site to show them the treatment process and the procedures in place to prevent any threat to the local environment and community. The benefit of this is that it can reduce any perceived negative opinions neighbours may have of the site.

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#### Key benefit of taking action

Site complaints, regarding noise for example, can be reduced by training staff to consider the impact their working proactices have on the surrounding environment.



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