Unit 202: Changing practices over time (tutor)

# Worksheet 6: Waste Management

**Task 1**: Duty of care

Using the terms provided fill in the spaces on the waste hierarchy diagram.



disposal re-use recovery prevention recycling

**Task 2:** Read the following statements and decide whether they are true or false. **Circle** the correct option.

1. Construction waste that poses a risk to the environment or human health is referred to as hazardous waste.

**True**

1. Segregating waste on site into separate material streams can help minimise costs and maximise the opportunities for recovery and recycling.

**True**

1. Construction waste that doesn't endanger the environment or human health is referred to as non-hazardous waste.

**True**

1. Landfill is the cheapest option for disposing of waste, regardless of type.

**False**

1. Waste carriers do not need to be licenced unless dealing with hazardous waste.

**False**

1. Hazardous waste needs a waste transfer note and a consignment note.

**True**

1. Landfill is the best option for waste disposal.

**False**

1. Some waste, such as copper and lead, can be sold onto registered scrap metal dealers for recycling.

**True**

1. All waste must have waste transfer notes and consignment notes if hazardous.

**True**

1. It is the responsibility of the waste producer to check the waste carrier has the correct licences.

**True**

**Task 3**: Waste reduction on site

Read this article <https://www.pbctoday.co.uk/news/planning-construction-news/construction-waste-management/115412/>

Using the information from this article and the internet complete the following task.

Identify and explain five different ways to reduce waste on site.

1. Material planning: Efficient material planning can help reduce waste on construction sites. By accurately estimating the required quantities of materials, ordering only what is necessary and opting for reusable or recyclable materials, waste generation can be minimised.
2. Effective ordering: Only ordering what is required at that time can reduce waste as there is less chance of materials been damaged in transportation or storage. Also rejecting defective materials will also help to reduce waste.
3. Waste segregation and recycling: Implementing a waste segregation system on site allows for the separation of different types of waste, such as plastics, metals, wood and concrete. This enables the recycling and reuse of materials, reducing the volume of waste that needs to be disposed of in landfills.
4. Proper on-site storage and handling: Ensuring proper storage and handling of materials and equipment helps prevent damage and spoilage, reducing waste. This includes protecting materials from weather conditions, using appropriate containers and implementing organised storage systems to avoid unnecessary loss or deterioration.
5. Training and education: Providing training and education to construction site workers regarding waste management and reduction practices is crucial. By raising awareness about the importance of waste reduction, proper handling and recycling, workers can actively participate in waste reduction efforts, leading to a more sustainable construction site.

**Task 4:** Identifying and dealing with hazardous waste

List eight different types of hazardous waste that can be found on site.

Answers may include the following.

* Asbestos
* Chemicals and solvents
* Lead-based materials
* Flammable substances
* Asbestos-containing materials (ACMs)
* Lead-based paints and coatings
* Solvents and chemical cleaning agents
* Paints, varnishes and lacquers (containing heavy metals)
* Construction chemicals (e.g., concrete admixtures, waterproofing compounds)
* Batteries (lead-acid, lithium-ion, etc.)
* Oils and lubricants
* Electronic waste
* Contaminated soils
* Fluorescent light bulbs
* Adhesives and sealants containing hazardous substances
* Pesticides and herbicides

**Task 5:** Answer the multiple choice questions below. **Circle** the correct response for each question.

1. Where can you get information on how to dispose of hazardous substances on site?
2. Manufacturers COSHH Data Sheet.
3. Risk assessments.
4. Don’t need it, just put it in the skip.
5. Not your responsibility.
6. For materials that contain asbestos to be classified as hazardous, they must contain at least
7. 100% asbestos
8. 1% asbestos
9. 0.1% asbestos
10. 10% asbestos
11. Hazardous waste must be
12. sent straight to landfill
13. ignored
14. just put it in the skip
15. not mixed with other waste streams.
16. Hazardous waste on construction sites should be handled by
17. any construction worker available
18. authorised carriers
19. local residents
20. general waste disposal companies.
21. Accurate record-keeping of hazardous waste handling on construction sites is necessary for
22. decorating the office space
23. demonstrating environmental responsibility
24. hiding waste disposal activities
25. streamlining waste transportation.

**Task 4:** Legislative duties

Complete the paragraphs using the words provided

Control of Substances Hazardous to Health (COSHH) Regulations

The COSHH Regulations require employers to assess and control the risks associated with hazardous substances. Construction companies must identify hazardous substances used on their sites, implement control measures to minimise exposure and provide suitable storage, handling and disposal procedures. COSHH also emphasizes the importance of employee training, use of personal protective equipment, and proper record-keeping.

Hazardous Waste Regulations 2005

The Hazardous Waste Regulations provide a framework for the identification, classification, and handling of hazardous waste. Construction companies must identify hazardous waste generated during their activities and ensure it is appropriately classified and labelled. The waste should be stored securely, transported by authorised carriers and disposed of at licensed waste management facilities capable of handling hazardous waste.

Environmental Protection Act 1990 (EPA)

The EPA establishes the overall framework for environmental protection in the UK. It imposes a duty of care on individuals and businesses to properly manage and dispose of waste, including hazardous waste. Construction companies must comply with the EPA's requirements for waste management, transportation and disposal ensuring that waste is handled by licensed facilities and disposed of in accordance with regulatory standards.

Pollution Prevention and Control (PPC) Act:

The Pollution Prevention and Control (PPC) Act aims to prevent and control pollution from various industrial activities, including construction. It sets requirements for controlling air emissions, noise pollution and other potential pollutants. Construction companies must implement measures to mitigate the environmental impact of their activities and comply with the PPC Act's provisions.

Waste Electrical and Electronic Equipment (WEEE) Regulations:

While primarily focused on electrical and electronic equipment, the Waste Electrical and Electronic Equipment (WEEE) Regulations also apply to hazardous waste generated from the disposal of such equipment. Construction companies must ensure that any hazardous waste from electrical and electronic equipment is properly collected, segregated and sent to authorised treatment facilities for recycling or disposal.