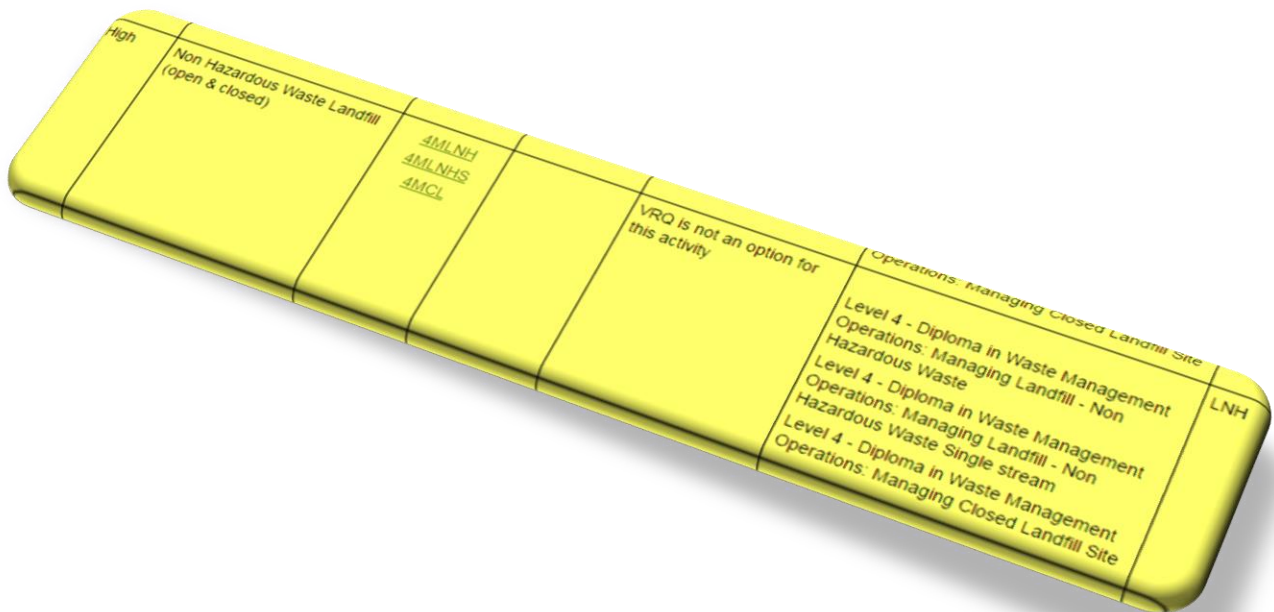


# CIWM/WAMITAB Continuing Competence



## Landfill Non-Hazardous

### Revision Summary

Version 1, January 2019

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## Introduction

### About WAMITAB

WAMITAB is an awarding organisation and charity that develops qualifications for those working in cleaning; street cleansing; facilities management; resource management and recycling and parking from operative through to management level.

Since it was formed in 1989, WAMITAB has evolved in line with the convergence between the sectors with a clear focus on promoting and supporting environmental sustainability. With over 120 qualification pathways and 70 quality assured centres, WAMITAB offers an unrivalled specialist network to support staff development.

### What is Continuing Competence?

The CIWM/WAMITAB continuing competence scheme is designed to ensure that the technically competent person (holds a certificate of technical competence, units or a qualification that is part of the CIWM/WAMITAB Operator Competence Scheme) on a waste site has knowledge and skills that keep pace with changes made across the waste management industry, such as the introduction of new legislation, technologies and techniques.

The CIWM/WAMITAB continuing competence scheme requires technically competent people in England and Wales to pass an assessment that demonstrates individuals have kept their competence up to date.

Keeping competence up to date is becoming increasingly important across the UK as society starts to recognise the crucial role that waste and resource management industry professionals play in ensuring that the 434 million tonnes of waste generated every year can be treated, reused and recycled to produce a product that will contribute to further economic growth.

### About this Revision Summary

WAMITAB recognise the diverse needs of learners within the sectors we represent. To support those individuals undertaking their Continuing Competence test, we have developed this revision summary.

This revision summary is designed to support you preparation by linking the learning outcomes with the areas that may come up during the Continuing Competence test.

# 1. Background



## Learning Outcomes

1.1 Know the legislation relevant to landfill:

- Design
- Construction
- Operation
- Closure
- Aftercare

1.2 Know what is included in a site specific, written management system.

1.3 Know the principles of financial provision for landfill.

1.4 Know when to undertake a financial provision assessment.

1.5 Know the timeframe and financial costs for the aftercare period according to guidance.

1.6 Know technical competence requirements for non-hazardous waste landfills.

## Where do I find this information?



- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Environment Agency \(2014\) Financial provision for landfill](#)
- [Natural Resources Wales \(2014\) LFD1 Understanding the landfill directive](#)
- [WAMITAB \(2018\) CIWM/WAMITAB Operator Competence Scheme](#)

## Notes

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## 2. Site Engineering



### Learning Outcomes

- 2.1 Know the principles of 'containment'.
- 2.2 Know the characteristics of liner and capping designs.
- 2.3 Know the elements of site construction which require Regulator approval.

### Where do I find this information?



- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Environment Agency \(2014\) Using Geomembranes in landfill engineering](#)

### Notes

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### 3. Waste Acceptance



**Learning Outcomes**

- 3.1 Know how waste acceptance procedures and criteria apply to non-hazardous waste landfills.
- 3.2 Know which wastes are banned from landfill and when to reject wastes.
- 3.3 Know how to determine that a waste is liquid.
- 3.4 Know the standards required for accepting:
  - Stable non-reactive hazardous waste
  - Gypsum
  - Asbestos
- 3.5 Know the requirements for on site verification and sampling of waste received.
- 3.6 Know what paperwork is required for accepting non-hazardous waste to landfill.

**Where do I find this information?**



- [Environment Agency \(2011\) Treatment of waste for landfill](#)
- [Environment Agency \(2009\) Landfill: how to comply with your environmental permit](#)
- [Environment Agency \(2010\) Waste acceptance at landfills](#)
- [GOV.UK \(2019\) Dispose of business or commercial waste](#)

**Notes**

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## 4. Pollution Sources: Landfill Gas



### Learning Outcomes

- 4.1 Know the principle reasons why landfill gas management is important.
- 4.2 Know what elements should be covered in a landfill gas management plan.
- 4.3 Know what should be included in a landfill gas monitoring and sampling plan.
- 4.4 Know the actions to take if a perimeter borehole contains landfill gas components (methane, CO<sub>2</sub>) at a range of levels including above a compliance limit.
- 4.5 Know what data should be recorded for each gas monitoring point.
- 4.6 Know why landfill gas should be collected, utilised and treated.
- 4.7 Know why it is important to control landfill gas and manage gas field balancing.
- 4.8 Know the procedures for dealing with deep and shallow fires.



### Where do I find this information?

- [Environment Agency \(2014\) Guidance on the management of landfill gas](#)
- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Environment Agency \(2010\) Guidance for monitoring trace components in landfill gas](#)
- [Environmental Services Association \(2012\) Landfill gas](#)
- [Environment Agency \(2014\) Guidance on the management of landfill gas](#)
- [Environment Agency \(2007\) Review and investigation of deep-seated fires within landfill sites](#)

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## 5. Pollution Sources: Leachate



### Learning Outcomes

- 5.1 Know the requirements for managing leachate.
- 5.2 Know why leachate levels must be maintained below a compliance limit.
- 5.3 Know the procedures for dealing with leachate above control levels and if a breach of compliance limit occurs.
- 5.4 Know the principles of leachate treatment and the associated pollution risks.
- 5.5 Know when a leachate re-circulation system could be permitted and any requirements for its use.
- 5.6 Know what information should be in a hydrogeological risk assessment.



### Where do I find this information?

- [Environment Agency \(2014\) Guidance for the treatment of landfill leachate](#)
- [Environment Agency \(2014\) Guidance on monitoring landfill leachate, groundwater and surface water](#)
- [Environment Agency \(2011\) Horizontal Guidance H1](#)
- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Environment Agency \(2014\) Hydrogeological risk assessment for landfill](#)

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## 6. Control of Emissions



### Learning Outcomes

- 6.1 Know what actions to take to control litter and when to use these controls.
- 6.2 Know the control measures for reducing the risk of fires on site.
- 6.3 Know the procedures for dealing with fires on site.
- 6.4 Know how to prevent mud and other debris from contaminating the public highway.
- 6.5 Know the procedures for dealing with noise, dust, odours and other nuisance arising from the site.



### Where do I find this information?

- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Environment Agency \(2007\) Review and investigation of deep seated fires within landfill sites](#)

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## 7. Landfill Management Activities



### Learning Outcomes

7.1 Know how and where stability of the landfill may be a problem and what the recommendations for managing stability are.

7.2 Know how to manage vehicles on landfill sites, including articulated vehicles, in line with WISH/HSE guidance.

7.3 Know why it is important to cover waste with suitable materials.

7.4 Know the implications of ‘settlement’ and ‘compaction’ within a landfill.

7.5 Know how settlement and compaction can impact:

- the restoration plan
- the gas/ leachate management

7.6 Know the requirements for establishing and maintaining a network of stable, permanent survey control stations.

7.7 Know the types of waste that might damage landfill liners and restoration layers.



### Where do I find this information?

- [Environment Agency \(2014\) Using geomembranes in landfill engineering](#)
- [Health and Safety \(2013\) Workplace transport safety](#)
- [Environment Agency \(2014\) Guidance on using landfill cover materials](#)
- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)

### Notes

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## 8. Groundwater and Surface Water Monitoring



### Learning Outcomes

8.1 Know why groundwater and surface water monitoring is needed in and around a landfill.

8.2 Know the difference between monitoring for operational performance, permit compliance limits and subsequent actions.



### Where do I find this information?

- [Environment Agency \(2014\) Guidance on monitoring landfill leachate, groundwater and surface water](#)

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## 9. Records and Reports



### Learning Outcomes

9.1 Know what records must be kept, for how long and when they may need to be submitted to the Regulator.

9.2 Know when and how notification to the Regulator is required.



### Where do I find this information?

- [Environment Agency \(2013\) How to comply with your environmental permit](#)
- [GOV.UK \(2019\) Hazardous waste](#)

### Notes

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## 10. Landfill Closure and Aftercare



### Learning Outcomes

- 10.1 Know the requirements and content for an up to date closure and aftercare plan (including monitoring).
- 10.2 Know the requirements for definite closure of all or part of a site, including restoration prior to entering the aftercare phase.
- 10.3 Know what the general requirements are for demonstrating standard permit surrender criteria have been met.



### Where do I find this information?

- [Environment Agency \(2011\) Understanding the landfill directive](#)
- [Environment Agency \(2012\) Landfill: How to surrender your environmental permit](#)

### Notes

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## 11. Landfill Specific Health and Safety



### Learning Outcomes

11.1 Know what Dangerous Substances or areas of explosive atmospheres may exist on a landfill site.

11.2 Know what should be identified within a Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) risk assessment for a landfill site.

11.3 Know the operator responsibilities in relation to Area Classification and marking of zones.

11.4 Know how to control ignition sources in order to reduce fire risk on a landfill site.

11.5 Know what training and information is required for employees and contractors in relation to Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR).

11.6 Know the control measures for reducing the impact of whole body vibration as a result of driving vehicles on landfill sites.



### Where do I find this information?

- [HSE \(2019\) The Dangerous Substances and Explosive Atmospheres Regulations](#)
- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Environment Agency \(2009\) Landfill: How to comply with your environmental permit](#)
- [Health and Safety \(2019\) Landfill fires – controlling the risk](#)
- [Health and Safety Executive \(2019\) Controlling vibration risks](#)

### Notes

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