Tit	le:	AEROBIC COMPOSTING (AC)			
Syl	llabus areas	Learning Outcomes	Source		
		The candidate will be able to:			
1.	Waste Acceptance Procedures Pre-acceptance procedures Waste reception and storage	 1.1 Know information, checks and records required prior to accepting waste 1.2 Know the acceptance procedures for waste that arrives at the aerobic composting facility 1.3 Know the requirements for waste reception and storage at the aerobic composting facility 1.4 Know the procedures for waste rejection at an aerobic composting facility 	 How to comply with your environmental permit: Additional technical guidance for: composting and aerobic treatment sector SR2012No3 (v2) Composting in closed systems <75 tonnes per day SR2012No7 (v2) Composting in open systems <75 tonnes per day SR2012No4 (v3) Composting in closed system (Part A Installation) SR2012No8 (v3) Composting in open systems (Part A Installation) 		
2.	Feedstocks Feedstock source Feedstock characterisation and sampling Mechanical Biological Treatment (MBT)	 2.1 Know the characteristics that should be tested as part of a detailed feedstock characterisation 2.2 Know why non-source segregated feedstocks potentially pose a greater environmental risk when using the resulting compost-like output 2.3 Know the consequences of using contaminated feedstocks for the aerobic composting process 2.4 Know the consequences of using contaminated feedstocks for the Mechanical Biological Treatment process 2.5 Know how the residual wastes from an aerobic composting facility should be controlled and managed 	 Environment Agency – Sustainable management of biowastes: Compost-Like Output from Mechanical Biological Treatment of mixed source municipal wastes Cut and paste link below webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/static/documents/Research/080331 MBT FINAL VERSION broken links removed.pdf DEFRA.GOV.UK Mechanical Biological Treatment of MSW. Organics Recycling Group – An industry guide for the prevention and control of odours at biowaste processing facilities SR2012No3 (v2) Composting in closed systems <75 tonnes per day SR2012No4 (v3) Composting in closed system (Part A Installation) SR2012No8 (v3) Composting in open systems (Part A Installation) 		
•	Accepting Animal By Products Animal By Products Regulations Food waste HACCP plan	 3.1 Know the types of aerobic composting facility that can handle catering waste according to Animal By Product Regulations 3.2 Know the requirements for record keeping regarding Animal By Products or food waste delivered to the site 3.3 Know what a Hazard Analysis Critical Control Point plan is in relation to gaining Animal By Products Regulations approval and what steps are required 	 GOV.UK: Animal by-products categories, site approval and hygiene GOV.UK: using animal by-products at compost and biogas sites 		

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4.	Odour control	4.1	Know what circumstances odours may be	•	Organics Recycling Group – An industry guide for the prevention and control
			produced during aerobic biological treatment		of odours at biowaste processing facilities
•	Monitoring		processes	•	Environment Agency – How to comply with your Environmental Permit (V6,
•	mitigation	4.2	Know the odour problems associated with aerobic		June 2013)
•	Feedstock control		biological treatment processes and how to control	•	Environment Agency – H4: Odour Management (March 2011)
•	Biofilters or other equivalent		them	•	How to comply with your environmental permit: Additional technical
	abatement systems	4.3	Know the methods used to monitor odour on an		guidance for: composting and aerobic treatment sector
	424cment 575cm.		aerobic composting facility	•	SR2012No3 (v2) Composting in closed systems <75 tonnes per day
		4.4	know alternative methods to biofilters for	•	SR2012No7 (v2) Composting in open systems <75 tonnes per day
			odour control	•	SR2012No4 (v3) Composting in closed system (Part A Installation)
		4.5	Know the limitations of using sniff testing for	•	SR2012No8 (v3) Composting in open systems (Part A Installation)
			monitoring odours		Children (15) Composing in open systems (1 are 1 mistanderon)
		4.6			
			management plan		
		4.7	Know the optimal operating conditions for Biofilters		
		4.8	Know how to identify the correct biofilter size for		
			aerobic biological treatment processes		
5.	Bioaerosols management	5.1	Know the factors affecting a bioaerosol risk	•	Environment Agency – Composting and potential health effects from
			assessment for sensitive receptors		bioaerosols: our interim guidance for permit applicants
•	Monitoring and control	5.2	Know the methods used for bioaerosol abatement	•	[http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.en
	methods		(including reducing point source releases)		<u>vironment-</u>
•	No-effect zones	5.3	Know where a safe/no-effect zone can be		agency.gov.uk/static/documents/Research/Composting_bioaerosols.pdf]
•	Biological risk assessments		established with regard to bioaerosol exposure	•	How to comply with your environmental permit: Additional technical
		5.4	Know the consequences of exposure to		guidance for: composting and aerobic treatment sector
			bioaerosols to staff and visitors and	•	SR2012No3 (v2) Composting in closed systems <75 tonnes per day
		5.5	Know how to manage the risk of exposure to	•	SR2012No7 (v2) Composting in open systems <75 tonnes per day
			bioaerosols	•	SR2012No4 (v3) Composting in closed system (Part A Installation)
				•	SR2012No8 (v3) Composting in open systems (Part A Installation)
				•	Environment Agency – Composting and potential health effects from
1					bioaerosols: our interim guidance for permit applicants
					http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.env
					<u>ironment-</u>
					agency.gov.uk/static/documents/Research/Composting bioaerosols.pdf
6.	Standards	6.1	Know what is required to prevent a 'product'	•	Compost Quality Protocol
			being referred to as waste	•	PAS 100: 2011 – Specification for Composted Materials (Please note you will
•	Quality Protocol	6.2	Know the characteristics of:		need to request this document from WRAP, but it is free of charge)
•	PAS 100		- a sanitisation regime	•	SR2012No3 (v2) Composting in closed systems <75 tonnes per day

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 HACCP plan Sanitisation Compost-like-output (CLO) Storage requirements Process Principles Process monitoring pH and nutrients Moisture content Temperature Feedstocks Plant and equipment breakdown Leachate 	 a stabilisation regime Know how a Hazard Analysis Critical Control Point plan can benefit a PAS 100 certified facility Know the maximum amount of contaminants permitted under PAS 100 Know the records required in order to comply with PAS 100 and the Quality Protocol Know under what conditions a compost like output can be applied to land from a non PAS 100 certified facility Know the storage requirements on land for both compost and compost like outputs Know the requirements and methods for source separation of feedstocks to meet PAS 100 Know the monitoring and control requirements for the aerobic composting process and how to manage it Know the nutrient ratios for feedstocks and why they are important for effective treatment Know the required moisture content for each phase of the aerobic composting process and how to manage it Know the required moisture content for each phase of the aerobic composting process and how to manage it Know the required moisture content for each phase of the aerobic composting process and how to manage it Know the treatment requirements for each phase of the aerobic composting process and how to manage it Know how to use feedstocks in relation to: Optimum size of input materials Preventing anaerobic composting process in accordance with regulatory and process

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	7.9 Know what is good practice for using collected leachate within the aerobic composting process	
 8. Other issues Fire prevention Vermin Litter Noise Dust Leachate management Protection of surface water, sewer and groundwater 	 8.1 Know methods of preventing and managing fires on an aerobic composting facility 8.2 Know the requirements for pest and vermin control 8.3 Know the requirements for litter prevention and control 8.4 Know the methods for minimising noise emissions 8.5 Know the requirements for dust prevention and control 8.6 Know the requirements for control of leachate 8.7 Know the requirements for the protection of surface water, sewer and groundwater from 	 How to comply with your environmental permit: Additional technical guidance for: composting and aerobic treatment sector SR2012No3 (v2) Composting in closed systems <75 tonnes per day SR2012No7 (v2) Composting in open systems <75 tonnes per day SR2012No4 (v3) Composting in closed system (Part A Installation) SR2012No8 (v3) Composting in open systems (Part A Installation) GOV.UK: Fire Prevention Plans WISH Guidance – Reducing fire risk at waste management sites
0 11 11 10 6	substances not controlled by emission limits	
9. Health and Safety	9.1 Know what information should be included in a formal accident management plan	 How to comply with your environmental permit: Additional technical guidance for: composting and aerobic treatment sector
Accidents management plan		

Additional Sources of information:

- Association of Organics Recycling http://www.organics-recycling.org.uk
- Waste and Resources Action Programme (WRAP) www.wrap.org.uk

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Title:	ANAEROBIC DIGESTION (AD)			
Syllabus areas	Learning Outcomes	Source		
10. Waste Acceptance Procedures Pre-acceptance procedures Waste Reception and storage	The candidate will be able to: 10.1 Know what information, checks and records required prior to accepting waste 10.2 Know the acceptance procedures for waste that arrives at the anaerobic digestion facility 10.3 Know the requirements for waste reception and storage at the anaerobic digestion facility 10.4 Know the procedures for rejection at an anaerobic	 GOV.UK: How to comply with your environmental permit (v6 June 2013) How to comply with your environmental permit. Additional guidance for: Anaerobic Digestion WRAP - PAS110 (2014) (Please note you will need to request this document from WRAP, but it is free of charge) 		
 11. Feedstocks Feedstock source Feedstock characterisation and sampling Contamination 	digestion facility 11.1 Know the types of feedstocks available for anaerobic digestion 11.2 Know the characteristics that should be tested as part of a detailed feedstock characterisation 11.3 Know the consequences of using contaminated feedstocks for the anaerobic digestion process 11.4 Know how the residual wastes from an anaerobic	GOV.UK: AD Quality Protocol SR2012No11: Anaerobic Digestion facility including use of the resultant biogas SR2012No11: Anaerobic Digestion facility including use of resultant biogas (Waste recovery operation – capacity less than 100 tonnes of waste per day)		
 12. Accepting Animal By Products Animal By Products HACCP plan 	digestion facility should be controlled and managed 12.1 Know the requirements for handling materials covered by Animal By Product Regulations 12.2 Know how a Hazard Analysis Critical Control Point plan can benefit a Animal By Products Regulations facility 12.3 Know the potential hazards to be assessed in relation to a Hazard Analysis Critical Control Point plan 12.4 Know the control measures required for feedstocks containing meat	 The Animal By-Products (Enforcement) (England) Regulations 2013 GOV.UK: Animal by-products categories, site approval and hygiene GOV.UK: using animal by-products at compost and biogas sites 		
 Emission Control and Abatement Point source emissions to air 	 13.1 Know the requirements for managing point source emissions to air 13.2 Know when the majority of fugitive emissions to air are likely to occur 13.3 Know the main methods of preventing point source 	 How to comply with your environmental permit. Additional guidance for: Anaerobic Digestion Organics Recycling Group – An industry guide for the prevention and control of odours at biowaste processing facilities (check if anything superceded by Draft EA guidance) 		

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•	Fugitive emissions to air	emissions to air	• Environment Agency – How to comply with your Environmental Permit (V6,
•	Odour management	13.4 Know the factors that determine the degree of odour	<u>June 2013)</u>
•	Bioaerosols	pollution	Environment Agency – H4: Odour Management (March 2011)
•	emissions to surface	13.5 Know the options for odour monitoring	Environment Agency – Generic Environment Risk Assessment for AD
	water, groundwater and	13.6 Know the methods used to prevent odour pollution	SR2010No15
	sewer	and minimise its impact	SR2012No11: Anaerobic Digestion facility including use of the resultant
•	Dust	13.7 Know what information should be included in an	biogas V3.0
•	Noise and vibration	odour management plan	Use this link for both the Standard Rules and the generic risk assessment
•	monitoring	13.8 Know where there is a risk of bioaerosols release	SR2012No11: Anaerobic Digestion facility including use of resultant biogas
		from the anaerobic digestion process and how to mitigate it	(Waste recovery operation – capacity less than 100 tonnes of waste per day)
		13.9 Know the requirements for control of emissions to	
		surface water, groundwater and the sewer	
		13.10 Know the control measures to supress dust	
		creation and dispersion	
		13.11 Know control measures to minimise the emission	
		of noise and vibration	
		13.12 Know what information is required if noise issues	
		become relevant	
14.	Standards	14.1Know the key principles of PAS 110	AD Quality Protocol
		14.2Know the treatment requirements for compliance	 https://www.gov.uk/government/publications/quality-protocol-anaerobic-
•	AD Quality Protocol	with PAS 110	<u>digestate</u>
•	PAS 110	14.3Know what is required in order to class an output	WRAP – PAS110 (2014) (Please note you will need to request this document
•	HACCP	from the anaerobic digestion process as a non waste	from WRAP, but it is free of charge)
•	Records	material	
		14.4Know the limitations and legislative compliance	
		requirements if outputs are not certified as meeting	
		PAS 110 and the Anaerobic Digestion Quality Protocol	
		14.5Know what wastes (including bioplastics) are	
		permitted in order to comply with PAS 110 and the	
		AD Quality Protocol	
		14.6Know what records need to be kept in order to	
		comply with PAS 110 and the Quality Protocol	
		14.7Know the principles of a Hazard Analysis Critical	
		Control Point plan and when it may apply	
		14.8Know the maximum amount of contaminants	
		permitted under PAS 110	

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		,
 15. AD Process Principles Pre-treatment pH and nutrients Pasteurisation Management and use of non PAS 110 outputs Biogas Organic Loading Rate Feedstocks Plant and equipment breakdown 	15.1Know the principles of anaerobic digestion treatment 15.2Know what pre-treatment may be required for different types of feedstock 15.3Know what key factors need to be monitored during the digestion process 15.4Know the pH range for feedstock and how to manage it 15.5Know the consequences of having too much nitrogen within the anaerobic digestion process 15.6Know the issues surrounding the production, storage, treatment and use of biogas 15.7Know the requirements for pasteurization 15.8Know how to identify the organic loading rate of the process 15.9Know the options for disposal of biogas condensate 15.10 Know the requirements for use of an auxiliary flare under a permit 15.11 Know the regulatory and process requirements that need to be managed in case of plant and equipment breakdown 15.12 Know the recommended nutrient ratios for an anaerobic digestion process for optimum methane production	WRAP – PAS110 (2014) (Please note you will need to request this document from WRAP, but it is free of charge) Environment Agency – How to comply with your environmental permit – Additional guidance for Anaerobic Digestion SR2012No11: Anaerobic Digestion facility including use of the resultant biogas SR2012No11: Anaerobic Digestion facility including use of resultant biogas (Waste recovery operation – capacity less than 100 tonnes of waste per day) HSE – Confined Spaces (published 01/13)
 16. Digestate Storage Sampling and testing Treatments Use 	16.1Know the requirements for the storage of digestate: - PAS 110 compliant - Non PAS 110 compliant 16.2Know the regulatory requirements for the storage of digestate in a lagoon 16.3Know when digestate sampling and testing may be required 16.4Know what digestate treatments may be required, their benefits and their uses 16.5Know the legal requirements for use of digestate not meeting the PAS 110 and the Anaerobic Digestion Quality Protocol	 Environment Agency – How to comply with your environmental permit – Additional guidance for Anaerobic Digestion SR2012No11: Anaerobic Digestion facility including use of the resultant biogas SR2012No11: Anaerobic Digestion facility including use of resultant biogas (Waste recovery operation – capacity less than 100 tonnes of waste per day)

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17. Health and Safety	17.1Know the hazards and risks associated with carrying	HSE – DSEAR Guidance (published 2013)	
	out maintenance in a digester	•	http://www.hse.gov.uk/pubns/books/l138.htm (includes info on 2015
Fire/ explosion prevention	17.2Know of the control measures to mitigate the risk of		changes!!)
Accidents and abnormal	fire, explosion and the other harmful physical effects	•	HSE – Confined Spaces (published 01/13)
operation	from dangerous substances as required by the		
• DSEAR	Dangerous Substances and Explosive Atmospheres		
 Confined spaces 	Regulations 2002		
·	17.3Know what should be included in a formal accident		
	management plan		

Additional Sources of information

HSE Website: <u>www.hse.gov.uk</u>

• Anaerobic Digestion and Biogas Association: http://www.adbiogas.co.uk/

• Renewable Energy Association: http://www.r-e-a.net/

• NNFCC: http://www.biogas-info.co.uk/

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Title:	CLINICAL WASTE	CW)	
Syllabus areas	Learning Outcomes The candidate will be able to:	Source	
 Storage and packagin Container types Packaging Labelling Storage 	18.1 Know the type of container required for fully and partially discharged 'sharps' used to administer pharmaceuticals 18.2 Know the type of container required for 'sharps' that are infectious but have not been used to administer pharmaceuticals i.e. taking blood/ dissecting blades. 18.3 Know the type of container for waste contaminated with cytotoxic/cytostatic medicinal products. 18.4 Know the type of container for waste medicinal products that are non- cytotoxic/ cytostatic. 18.5 Know the type of packaging used for infectious healthcare wastes. 18.6 Know the UN marks on packaging that can be used for different types of wastes 18.7 Know how waste containers on site should be labelled 18.8 Know the 'appropriate measures' for safe storage of waste onsite 18.9 Know the 'appropriate measures' that should be taken when cleaning storage areas and containers 18.10 Know the 'appropriate measures' for managing clinical waste to avoid problems with odour, litter and vermin	 Health Technical Memorandum 07-01: Safe Management of Healthcare Waste (2013) HSE Guidance: Management of Healthcare Waste Environment Agency - How to comply with your environmental permit: additional guidance for clinical waste (EPR 5.07) (Version 1.1, January 2011) 	
19. Classification of wast	es 19.1 Know which wastes are hazardous 19.2 Know which wastes are non-hazardous	 Technical Guidance WM3 – Guidance on the Classification and Assessment of waste (1st edition, 2015) Health Technical Memorandum 07-01: Safe Management of Healthcare Waste (2013) 	
20. Consignment proced	ures 20.1 Know the paperwork is required when accepting consignments of hazardous and non-hazardous waste. 20.2 Know the frequency of returns to the Regulator made by a	 GOV.UK –hazardous waste GOV.UK – Receive and dispose of hazardous waste GOV.UK - Your waste – your responsibility (Duty of Care) 	

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		consignee of hazardous waste	•	Electronic Duty of Care
•	Waste Acceptance procedures Pre-acceptance Procedures and checks Storage and disposal Non-conforming wastes Records	 21.1 Know the requirements for pre-acceptance of clinical waste 21.2 Know the requirements for onsite waste acceptance procedures and checks 21.3 Know the requirements of a policy for the storage and disposal of rejected waste. 21.4 Know the actions required when non-conforming wastes are identified 21.5 Know what information should be recorded on the site waste tracking system 	•	Environment Agency - How to comply with your environmental permit: additional guidance for clinical waste (EPR 5.07)(Version 1.1, January 2011)
•	Treatment and disposal options available for clinical waste Infectious wastes Wastes suitable/ unsuitable for landfill High and low temperature (non-burn) treatments	 22.1 Know the correct disposal routes for infectious wastes and sharps containers 22.2 Know what 'rendered safe' means for wastes going to landfill 22.3 Know when waste should not be macerated 22.4 Know which technologies are described as 'high temperature' and 'non-burn/low temperature' 22.5 Know the requirements for Validation and Efficiency testing of treatment plants 	•	Health Technical Memorandum 07-01: Safe Management of Healthcare Waste (2013) Environment Agency - How to comply with your environmental permit: additional guidance for clinical waste (EPR 5.07)(Version 1.1, January 2011)

Additional sources of information:

- CIWM guidance: http://www.ciwm-journal.co.uk/downloads/Healthcare-Waste-WEB.pdf
- HSE guidance: https://www.gov.uk/government/publications/carriage-of-dangerous-goods-guidance-other-than-class-7
- RCN guidance: http://www.rcn.org.uk/ data/assets/pdf file/0006/585447/004187 health care waste.pdf

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Title:	Contaminated Land	Remediation
Syllabus areas	Learning Outcomes The candidate will be able to:	Sources
 Site Remediation Strategy The options appraisal The remediation strategy The Implementation plan The verification plan The monitoring and aftercare plan 	 1.1 Know the key requirements and role of the options appraisal 1.2 Know the key requirements and role of the remediation strategy 1.3 Know how contaminated land remediation can impact flooding risk and where this is identified within the site remediation strategy 1.4 Know the key requirements and role of the implementation plan 1.5 Know what specific issues the Local Authority and the Regulator will need to ensure is addressed within an implementation plan 1.6 Know the key requirements and role of the verification plan 1.7 Know the key requirements and role of the monitoring and maintenance plan 	 GOV.UK: Model Procedures for the Management of Land Contamination Environmental Protection Act 1990 Part 2A The Water Resources Act 1991 The Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009 Contaminated Land (England) Regulations 2006 The Contaminated Land (Wales) Regulations 2006 The Town and Country Planning (Environmental Impact Assessment) Regulations 2011
2. In-situ and ex-situ remediation	2.1 Know the legal definition of waste in relation to remediation of land activities	GOV.UK options appraisal: identifying feasible remediation options.
 In-situ and ex-situ remediation Environmental impacts of in-situ and ex-situ remediation techniques 	 2.2 Know the definitions of the terms: in-situ remediation ex-situ remediation 2.3 Know the in-situ remediation technique that may be employed under an Environmental Permit 2.4 Know the reason for choosing a range of remediation techniques 2.5 Know the environmental impacts of in-situ and ex-situ remediation techniques 	GOV.UK: Land Contamination Technical Guidance
3. Deployment of mobile plantScope and timing of Deployment For	3.1. Know what an operator working under a mobile plant permit is required to do prior to moving to a new site	 GOV.UK - MPP2 Guidance notes – Application for deployment of mobile plant for land and/or groundwater remediation (version 1) GOV.UK - MPP2 Deployment Form (version 1)

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D 1 15 14000 1 1	22 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1	
Deployment Form MPP2 -information	3.2. Know what information the conceptual site	GOV.UK - SR2008No27 - Mobile plant for the treatment of soils
required	model (CSM) should contain when submitting	
 Management requirements 	Deployment Form	GOV.UK – How to comply with your environmental permit (version)
 Notification requirements 	3.3. Know what aspects of waste acceptance	<u>6, June 2013)</u>
	procedures should be covered within a	
	deployment form	
	3.4. Know how to identify authorised treatment	
	technologies when completing a Deployment	
	Form	
	3.5. Know the minimum requirements for	
	attendance by a Technically Competent	
	Manager (TCM) when undertaking an activity	
	subject to a Deployment Form	
	3.6. Know the monitoring requirements to be	
	included in Deployment Form MPP2	
	3.7. Know how long an activity can take place for	
	under a deployment form	
4. Standard Rules Permits	4.1. Know the minimum volumes required for	GOV.UK – Storing oil at home or business – how to store, design
	bunding when storing non-aqueous phase	standards and tank protection.
Bunding requirements	liquid (NAPL), fuels and oils	GOV.UK – storing oil at your business.
 Standard Rules Permit (SRP)conditions 	4.2. Know which remediation activities are covered	
Abstraction	by SR2008 No 27	Regulations 2001
Trials	4.3. Know what actions to take if planning a	
• Iriais	remediation technique which is not permitted	Environment Agency - SR2008No27 - Mobile plant for the
	by an appropriate Standard Rule Permit	the catherine of the contract of the catherine of the cat
	4.4. Know the requirements of the SRP relating to	products (version 7.1)
	records retention and security	Environment/Agency Will 2 Galdance notes Application for
	•	deployment of mobile plant for land and/or groundwater
	4.5. Know how a Standard Rule Permit for a mobi	remediation (version 1)
	plant identifies which waste types can be	 Environment Agency – MPP2 Deployment Form (version 1)
	stored or treated in accordance with the	GOV.UK: Model Procedures for the Management of Land
	permit	<u>Contamination</u>
	4.6. Know the limitations of the "mobile plant	GOV.UK Water Management: apply for a water abstraction or
	permit" with regards to water abstraction and	impoundment licence
	the limit above which abstraction requires a	Environment Agency – How to comply with your environmental
	licence or permit	permit (version 6, June 2013)

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5. Waste disposal	5.1 Know what wastes can be sent off-site for • GOV.UK – Waste Acceptance at Landfills
5. Waste disposal	
a Landfill	· · · · · · · · · · · · · · · · · · ·
• Landfill	Know what documentation is required for WRAP – Quality Protocol for the Production of Aggregates from WRAP – Quality Protocol for the Production of Aggregates from
Waste Classification and Acceptance	waste disposal in a landfill site Inert Waste (September 2005)
Criteria	• GOV.UK Waste Classification technical guidance – WM3
Hazardous waste	to characterise waste soils • GOV.UK: Land contamination: technical guidance: site
	5.4 Know the Waste Acceptance Criteria for <u>characterisation – field and laboratory analysis</u>
	depositing waste soils at an inert landfill
	5.5 Know how to determine if a waste soil with a
	mirror entry is hazardous or non-hazardous
	5.6 Know which Persistent Organic Pollutants
	(POPs) are considered when determining
	whether a waste is hazardous or not
	5.7 Know the information sources which may be
	needed to determine if a waste has any
	hazardous properties
	5.8 Know the Hazard Properties (HP) codes for
	potentially hazardous wastes and the
	implications for staff safety
6. Environmental risk, monitoring and	6.1 Know the requirements for managing dust in • GOV.UK – Horizontal Guidance – H3 Noise
control	accordance with Standard Rules and Regulator • GOV.UK Environmental Permitting:H4 odour management
	guidance • Environment Agency – MPP2 Deployment Form (version 1)
 Dust, noise, odour 	6.2 Know the requirements for managing any • Environment Agency - MPP2 Guidance notes – Application for
 Bioremediation 	potential odour problems in accordance with deployment of mobile plant for land and/or groundwater
 Groundwater 	Standard Rules and Regulator guidance remediation (version 1)
 Spills/leaks 	• GOV.UK – How to comply with your environmental permit
Japanese Knotweed	potential noise problems in accordance with • GOV.UK: Land Contamination Technical Guidance
Control of atmospheric volatile	Standard Rules and Regulator guidance • GOV.UK Japanese Knotweed; managing on development sites
organic compounds (VOC)	6.4 Know the noise levels that cause complaint GOV.UK The biological control of Japanese Knotweed
emissions	6.5 Know the two field parameters that are • GOV.UK Harmful weeds and invasive, non-native plants: prevent
	monitored during bioremediation them spreading
	6.6 Know the action needed when encountering
	groundwater during the excavation of
	contaminated soils
	6.7 Know what remedial action is necessary if
	unexpected water flow is experienced during
	excavations

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	 6.8 Know what action is required in the event of a leaking fuel tank in the plant compound 6.9 Know what Japanese Knotweed is and how to deal with it 6.10Know the potential adverse effects of atmospheric VOC emissions 6.11Know the minimum requirements for documenting atmospheric VOC emissions 	
 Vaste Exemptions Environmental Permits WRAP Quality Protocol CL:AIRE Code of Practice 	 7.1 Know the specific use of material under the U1 Waste Exemption 7.2 Know the quantity limits under the U1 Waste Exemption 7.3 Know the time period for quantity limits under the U1 Waste Exemption 7.4 Know the constraint on renewing exemptions 7.5 Know the alternatives for use of wastes when exemptions are not available 7.6 Know under what circumstances can a waste material from a contaminated land remediation site be consider NOT to be a waste 	 GOV.UK – U1 Use of Waste in Construction CL:AIRE Definition of Waste: Development Industry Code of Practice GOV.UK: Turn your waste into a new non-waste product or material GOV.UK Quality Protocols: converting waste into non waste

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Title:	END-OF-LIFE VEHICLES (ELV)			END-OF-LIFE VEHICLES (ELV)		
Syllabus areas	Learning Outcomes The candidate will be able to:	Source				
 Scrap Metal Dealers Act 2013 Applying for a licence Register of Licences Revoking licences Displaying licences Verifying suppliers identity Forms of payment Keeping records Offences 	 22.6 Know who is responsible for issuing scrap metal licences 22.7 Know the difference between a site licence and a collectors licence 22.8 Know the definition of a 'suitable person' in terms of applying for a site licence 22.9 Know how long a licence is valid for 22.10 Know the circumstances under which a licence can be revoked or conditions imposed 22.11 Know the conditions that may be imposed on a licence 22.12 Know the information required for the Register of Licences 22.13 Know who to notify when a licence is no longer required, and by when 22.14 Know where site licences and collectors licences must be displayed 22.15 Know what information is required to verify a supplier's identity 22.16 Know what forms of payment are acceptable when paying for end of life vehicles 22.17 Know what records must be kept when receiving and disposing of end of life vehicles 22.18 Know how long records for receipt/disposal of end of life vehicles should be kept for 22.19 Know the offences under the Scrap Metal Dealers Act 2013 	 Scrap Metal Dealers Act 2013 Scrap Metal Dealers Act 2013 – Explanatory Notes Scrap Metal Dealers Act 2013 supplementary guidance Scrap Metal Dealers Register 				
 Certificates of Destruction Information required Record keeping 	23.1Know what information is required about the holder/owner of the vehicle when completing a Certificate of Destruction 23.2Know what information is required about the vehicle when completing a Certificate of Destruction	 The End of Life Vehicles Regulations 2003 The End of Life Vehicles Regulations 2003 – schedule 3 minimum requirements for destruction GOV.UK End of Life Vehicles: guidance for waste sites 				

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 Depollution Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 	 24.1 Know the procedure for removing fuel from a fuel tank 24.2 Know why the battery is removed before the fuel tank is depolluted 24.3 Know the health and safety requirements for assessing the risk of fire and explosion when storing or handling petrol 24.4 Know how to ensure safe working in areas designated as 'hazard areas' in accordance with DSEAR 24.5 Know how to exclude ignition sources from a hazard area 	 GOV.UK - Depolluting End of Life Vehicles (Cars and Light Goods Vehicles): Guidance for Authorised Treatment Facilities (March 2011) HSE - The safe recovery of petrol from end of life vehicle (published 07/15)
25. Depollution • Best Practice guidelines	 25.1 Know the depollution sequence outlined in the Depollution Guidance for Authorised Treatment Facilities 25.2 Know the time delays, procedures and safety measures for airbag detonation 25.3 Know the procedures for: Draining and removal of engine oil, Draining gearbox transmission oil, Removing brake and screen waste fluid, Removing antifreeze and air conditioning refrigerants 25.4 Know where transmission and hydraulic oils are located 25.5 Know how to deal with shock absorbers and catalytic converters 25.6 Know the procedures an ATF should follow when removing LPG tanks 25.7 Know the requirements for dealing with F Gas when disposing of air conditioning units from vehicles 	 GOV.UK - Depolluting End of Life Vehicles (Cars and Light Goods Vehicles): Guidance for Authorised Treatment Facilities (March 2011) GOV.UK End of Life Vehicles: guidance for waste sites GOV.UK F Gas requirements for air conditioners in cars and other vehicles BIS – Removal of LPG Tanks: Guidance(April 2011)
26. Site infrastructure / Storage areas • Specific requirements for different waste types • Requirements for storage areas	5.1 Know the surface and drainage requirements for storing: - Liquids - Contaminated materials - Hazardous waste 5.2 Know the storage conditions for lead-acid batteries 5.3 Know the storage conditions for un-depolluted vehicles 5.4 Know the minimum requirements for the separate storage of fluids removed from end of life vehicles 5.5 Know the minimum requirements for the storage of uncontaminated: - Plastics - Glass	 Environment Agency – Standard Rules Permit SR2008No20_75kte: Vehicle Storage, Depollution and dismantling (authorised treatment) facility(June 2012, V5.0) Environment Agency – Standard Rules Permit SR2011No3: Vehicle Storage, Depollution and dismantling (authorised treatment) facility(June 2013 V3.0) Environment Agency – Standard Rules Permit SR2012 No14 Metal recycling, vehicle storage depollution and dismantling facility. Environmental Permitting Regulations – Schedule 11 Waste Motor Vehicles GOV.UK - Depolluting End of Life Vehicles (Cars and Light Goods

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	 Ferrous Non-ferrous metal waste 5.6 Know the minimum requirements for checking, storing and maintaining containers of polluting liquids 	Vehicles): Guidance for Authorised Treatment Facilities(March 2011) How to Comply with your Environmental Permit
 27. Hazardous Waste Types of hazardous waste, Recognition of hazardous waste using EWC Hazardous waste consignment 	 27.1 Know the wastes classified as hazardous from end of life vehicle treatment 27.2 Know how to identify a hazardous wastes from the correct List of Wastes (EWC) codes 27.3 Know how to use guidance to identify the hazardous properties of waste 27.4 Know how long to keep hazardous wastes consignment notes 27.5 Know the paperwork needed for the disposal of hazardous waste 27.6 Know the frequency of returns to the Regulator made by a consignee of hazardous waste 	 Environment Agency – Technical Guidance WM3: Hazardous Waste(1st edition, 2015) Environment Agency – Move hazardous waste Environment Agency – Hazardous Waste – Producers and Holders Environment Agency – Technical Guidance WM3: Hazardous Waste(1st edition, 2015)
28. Export of Waste	28.1Know the restrictions and controls relating to export of end of life vehicle waste outside of the UK	Gov.UK Waste: Import and Export

Additional Sources of information:

- The Motor Vehicle Dismantlers Association (MVDA): <u>www.mvda.org.uk</u>
- British Metals Recycling Association (BMRA): www.recyclemetals.org
- British Vehicle Salvage Federation (BVSF):<u>www.bvsf.org.uk</u>

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Title:	LAND SPREADING (LSNHW)		
Syllabus Areas	Learning Outcomes The candidate will be able to:	Sources	
 Waste acceptance Waste acceptance Transfer Notes Non-compliant waste 	28.2Know how to determine the suitability of waste for spreading in accordance with permit conditions 28.3Know the onsite waste acceptance procedures and checks 28.4Know the actions required when non-conforming wastes are identified 28.5Know the information required on a Waste Transfer Note 28.6Know who is responsible for characterising waste 28.7Know the actions to take if you need to spread waste that is not listed in the standard rules	 How to Comply with Your Environmental Permit (V6.0, June 2013) How to comply with your Landspreading Permit (v2 2013) Duty of Care Waste Transfer Notes Standard Rules/ permitting SRP 2010 No. 4 (v3) Mobile Plant for Landspreading (land treatment resulting in benefit to agriculture or ecological improvement) SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) LPD1 Application for Deployment LPD1 Guidance notes – Application Deployment 	
 29. Storage requirements for waste materials to be spread to land Storage requirements Water and rainfall Site infrastructure Drainage requirements Lagoons and containers 	 2.1 Know the storage requirements for waste materials which will be spread to land 2.2 Know the procedures for minimising pollution during storage of waste materials to be spread to land 2.3 Know the procedures for checking odour emissions from stored waste materials are within Permit limits 2.4 Know the control measures to put in place if emissions exceed permitted limits or are not controlled by set limits 2.5 Know the requirements for a sealed drainage system with an impermeable surface 2.6 Know the requirements for a secondary containment systems for liquid waste 2.7 Know how field drainage systems can affect the impact of watercourse contamination and how it can be controlled 2.8 Know the maximum capacities and freeboard of lagoons and containers 	 EA Guidance - H4 - Odour Management How to Comply with Your Environmental Permit (V6.0, June 2013) How to comply with your Landspreading Permit (v2 2013) SRP 2010 No. 4 (v3) Mobile Plant for Landspreading (land treatment resulting in benefit to agriculture or ecological improvement) SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) Environment Agency - PPG 2 Above ground oil storage tanks GOV.UK Duty of Care - Store waste correctly 	
3 Quality assuring the deployment process	3.1 Know the procedure for gaining approval to enable deployment to spread waste to land	LPD1 Application for Deployment LPD1 Guidance notes – Application Deployment Page 19 of 47	

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 Approval process Deployment Benefits of landspreading Activity specific risks Location plans 	 3.2 Know the benefit associated with spreading waste to the land 3.3 Know the requirements of an effective Environmental Management System (EMS) 3.4 Know why a site specific risk assessment may be required when spreading waste to land 3.5 Know the control measures used to mitigate risks when spreading waste to land 3.6 Know what information is required on a location plan 3.7 Know what to do if any changes to the deployment are required
 4. Environmental protection requirements for landspreading Control of pests Handling spillages Odour control Alternative techniques of spreading to land Record keeping 	 4.1. Know the procedures for managing pests and scavengers during landspreading to minimise nuisance 4.2. Know the procedures for managing odour during landspreading in accordance with an odour management plan 4.3. Know the procedures for handling spillages on site 4.4. Know the record keeping requirements for land spreading data 4.5. Know the main features, benefits and risks of the different spreading techniques available 4.6. Know the main features, benefits and risks of the different spreading techniques available 4.6. Know the main features, benefits and risks of the different spreading techniques available 4.7. Management 4.8. Hay to Comply with Your Environmental Permit (V6.0, June 2013) 4.9. Environment Agency – PPG 1 Understanding your Environmental Responsibilities 4.9. SRP 2010 No. 4 (v3) Mobile Plant for Landspreading (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading Permit (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mobile Plant for Landspreading of sewage sludge (land treatment resulting in benefit) 4.9. SRP 2010 No. 6 (v2) Mob

Important Information:

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Title:	LANDFILL: CLOSED (LC)		
Syllabus areas	Learning Outcomes The candidate will be able to:	Source sble to:	
1. Background and legislation	29.1 Know the legislation relevant to landfill management during aftercare for sites that closed; - Prior to July 2001 - After July 2001 29.2 Know the importance and content of a site specific, written management system 29.3 Know the principles of financial provisions for landfill and how it applies during aftercare	 GOV.UK: Understanding the landfill Directive Landfill: How to comply with your environmental permit – additional guidance GOV.UK: Financial provision for landfill 	
2. Site engineering	 2.1 Know the principles of 'containment' 2.2 Know the principle elements of any capping system and how to maintain it 2.3 Know the elements of site construction that require Regulator approval 	 https://www.gov.uk/government/publications/our-approach-to-landfill-engineering-lfe1 https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance Landfill: How to comply with your environmental permit – additional guidance GOV.UK: Understanding the landfill Directive 	
3. Landfill gas	3.1 Know why landfill gas management is important during aftercare 3.2 Know the actions to take if a perimeter borehole contains methane above a compliance limit 3.3 Know what data should be recorded for each gas monitoring point 3.4 Know why landfill gas must be utilised	GOV.UK - LFTGNo3: Guidance on the management of landfill gas GOV.UK - LFTGNo4: Guidance on the monitoring of trace components in landfill gas	
4. Leachate	 4.1 Know why leachate levels must be maintained below a limit 4.2 Know the actions to take if the site has: Leachate above control levels If a breach of compliance limit occurs 4.3 Know the principles of leachate treatment and the associated pollution risks 	 Environment Agency – TGN02 Monitoring landfill leachate, groundwater and surface water Gov.UK Horizontal Guidance Note H1 – Annex J3 – Hydrogeological risk assessment for landfills Landfill: How to comply with your environmental permit – additional guidance GOV.UK – LFTGN02: guidance on monitoring of landfill leachate, groundwater and surface water. 	

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		 4.4 Know what a leachate re-circulation system needs to achieve 4.5 Know the infrastructure needed to support leachate re-circulation 4.6 Know what precautions need to be taken to recirculate leachate 4.7 Know the information required in a hydrogeological risk assessment 		
5.	Aftercare monitoring	 5.1 Know the implications of standing water on a capping system 5.2 Know why it is important to keep an up to date site closure, aftercare plan and closure report 5.3 Know why it is important to monitor in and around a closed landfill 5.4 Know the difference between monitoring for compliance and operational performance 	•	Gov.UK Horizontal Guidance Note H1 – Annex J3 – Hydrogeological risk assessment for landfills Environment Agency – Additional Guidance for Landfill (EPR 5.02) and other permanent deposits of waste: How to surrender your environmental permit (Version 2, issued 13/12/2012) GOV.UK: Understanding the landfill Directive
6	Records and reports	6.1 Know what records must be kept and for how long6.2 Know what records need to be submitted to the regulator and at what frequency6.3 Know the 'notifications' requirement of permits	•	Landfill: How to comply with your environmental permit – additional guidance
7	Permit surrender	7.1 Know the permit surrender process and data requirements	•	Environment Agency – Additional Guidance for Landfill (EPR 5.02) and other permanent deposits of waste: How to surrender your environmental permit (Version 2, issued 13/12/2012)

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Title:	LANDFILL: HAZARDOUS WASTE (LH)	
Syllabus areas	Learning Outcomes The candidate will be able to:	Source
 Background and Legislation Legislation Management system Finance 	 29.4 Know the legislation relevant to landfill: Design Construction Operation Closure Aftercare 29.5 Know what is included in a site specific, written management system 29.6 Know the principles of financial provision for landfill 29.7 Know when to undertake a financial provision assessment 29.8 Know the timeframe and financial costs for the aftercare period according to guidance 	 https://www.gov.uk/government/publications/un derstanding-the-landfill-directive-lfd-1 https://www.gov.uk/government/publications/lan dfill-sector-technical-guidance https://www.gov.uk/government/publications/fin ancial-provision-for-landfill
2. Site engineering	 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 	 https://www.gov.uk/government/publications/our -approach-to-landfill-engineering-lfe1 https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance
3 Waste acceptance	 3.1 Know how waste acceptance procedures and criteria apply to 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 asbestos 3.5 Know the requirements for on-site verification and sampling of waste received 3.6 Know how to identify if a waste is hazardous or not. 3.7 Know the Information required on a hazardous waste consignment note. 	GOV UK Waste Acceptance at landfills Technical Guidance WM3: Waste Classification – guidance on the classification and assessment of waste. GOV.UK – Hazardous waste: consignment notesupplementary guidance
4 Pollution sources – Landfill gas	 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 	GOV.UK Environmental Permitting: Landfill sector technical guidance GOV.UK – Guidance on the management of landfill gas, LFTGN03

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		4.4 Know the actions to take if a perimeter borehole contains landfill gas	•	GOV.UK – Landfill: How to comply with your
		components (methane, CO ₂) at a range of levels including above a		permit: Additional guidance
		compliance limit	•	GOV.UK LFTGN04: guidance for monitoring trace
		4.5 Know what data should be recorded for each gas monitoring point		components in landfill gas.
		4.6 Know why landfill gas must be utilised		
		4.7 Know why it is important to control landfill gas and manage gas field		
		balancing		
5	Pollution sources - leachate	5.1 Know the requirements for managing leachate	•	Gov.UK: Guidance for the treatment of landfill
		5.2 Know why leachate levels must be maintained below a limit		<u>leachate</u>
		5.3 Know the procedures for dealing with leachate above control levels and if a	•	GOV.UK LFTGN02: guidance on monitoring of
		breach of compliance limit occurs		landfill leachate, groundwater and surface water
		5.4 Know the principles of leachate treatment and the associated pollution risks	•	GOV.UK – Landfill: How to comply with your
		5.5 Know the requirements for a leachate re-circulation system including the		permit: Additional guidance
		infrastructure and precautions	•	GOV.UK Hydrogeological risk assessment for
				<u>landfill</u>
			•	Environment Agency - Horizontal guidance Note
				H1 - Annex J 3. Additional guidance for
				hydrogeological risk assessments for landfills and
				the derivation of groundwater control levels and
				compliance limits (version 2.1, December 2011)
			•	Waste Acceptance at Landfills
6	Control of amenity emissions	6.1 Know what actions to take to control litter and when to use these controls	•	Environment Agency – How to comply with your
	 Litter, mud and fire 	6.2 Know the control measures for reducing the risk of fires on site		environmental permit: Additional guidance for
	 Noise, dust, odour 	6.3 Know the procedures for dealing with fires on site		Landfill (EPR5.02) (March 2009)
		6.4 Know how to prevent mud and other debris from contaminating the public	•	https://www.gov.uk/government/publications/lan
		highway		dfill-sector-technical-guidance
		6.5 Know the procedures for dealing with noise, dust, odours and other	•	Environment Agency – Review and Investigation of
		nuisance arising from the site		deep-seated fires within landfill sites.
<u> </u>	- 11 1611		-	
7	General landfill management	7.1 Know how and where stability of the landfill may be a problem and what	•	https://www.gov.uk/government/publications/lan
	activities	the recommendations for managing stability are		dfill-sector-technical-guidance
1	G. 1.11.	7.2 Know how to manage vehicles on landfill sites, including articulated	•	HSE – Workplace transport safety (published
1	• Stability	vehicles, in line with WISH/HSE guidance		05/13)
	Settlement/ Compaction	7.3 Know why it is important to cover waste with suitable materials	•	Environment Agency - LFE6: Guidance on using
	 Vehicle management 	7.4 Know what is meant by the terms 'settlement' and 'compaction' within a		landfill cover materials
	• Cover	landfill	•	Environment Agency – How to comply with your

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Restoration	 7.5 Know how settlement and compaction can impact: the restoration plan the gas/ leachate management 7.5 Know the requirements for establishing and maintaining a network of stable, permanent survey control stations 7.6 Know the types of waste that might damage landfill liners and restoration layers 	 Environmental Permit (Version 6, June 2013) Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) HSE: Guidance – Vehicle movements HSE: Safe Transport in the waste and recycling industry
8. Groundwater and surface water monitoring	 8.1 Know the need for groundwater and surface water monitoring in and around a landfill 8.2 Know the difference between monitoring for operational performance and permit compliance limits and subsequent actions 	 https://www.gov.uk/government/publications/monitoring-of-landfill-leachate-groundwater-and-surface-water-lftgn-02 Environment Agency - Horizontal guidance Note H1 - Annex J 3. Additional guidance for hydrogeological risk assessments for landfills and the derivation of groundwater control levels and compliance limits (version 2.1, December 2011) Environment Agency - How to comply with your environmental permit. V6 Environment Agency - How to comply with your environmental permit: Additional guidance for Landfill (EPRS.02) (March 2009)
9 Records and reports 10 Landfill closure and aftercare	 9.1 Know what records must be kept, for how long and when they might need to be submitted to a Regulator 9.2 Know when and how notification to the Regulator is required 9.3 Know the requirements for hazardous waste consignment returns to the Regulators and Producers 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 	 Environment Agency – How to comply with your environmental permit. V6 Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) GOV.UK Hazardous waste: returns – supplementary guidance https://www.gov.uk/government/publications/un derstanding-the-landfill-directive-lfd-1 GOV.UK – How to surrender your Environmental Permit: landfill Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009)
11. Landfill specific Health and Safety	11.1 Know what Dangerous Substances or areas of explosive atmospheres may exist on a landfill site	HSE: Dangerous Substances Explosive Atmospheres Regulations

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DSEARFireVibration	 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 	 Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) HSE: Landfill fires – controlling the risk
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Title:	LANDFILL: INERT WASTE (LIN)	
Syllabus areas	Learning Outcomes The candidate will be able to:	Source
 1. General/ background Legislation Management system Finances 	29.9 Know the legislation relevant to landfill: - Design - Construction - Operation - Closure - Aftercare 29.10 Know what is included in a site specific, written management system 29.11 Know the principles of financial provision for landfill 29.12 Know when to undertake a financial provision assessment 29.13 Know the timeframe and financial costs for the aftercare period according to guidance	GOV.UK LFD1 Understanding the Landfill Directive GOV.UK Landfill: how to comply with your environmental permit – additional guidance GOV.UK Financial provision for landfill GOV.UK Financial provision for landfill
30. Site engineering	2.1 Know the principles of 'attenuation'2.2 Know why a geological barrier is required2.3 Know the elements of site construction that require Regulator approval	GOV.UK LFE1 Our Approach to Landfill Engineering GOV.UK Environmental Permitting – Landfill sector technical guidance GOV.UK Landfill: how to comply with your environmental permit – additional guidance
31. Waste acceptance	 3.1 Know what inert waste is (in accordance with the Landfill Directive definition) 3.2 Know the waste acceptance procedures and criteria that apply to inert waste landfills, including; Waste acceptable without testing Waste that must be tested Technically Feasible Landfill gas risk assessment 3.3 Know which wastes are banned from landfill and when to reject waste 3.4 Know how to determine that a waste is a liquid 	 Environment Agency – Waste acceptance at landfills (version 1, November 2010) COUNCIL DECISION of 19 December 2002: establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPRS.02) (March 2009) Environment Agency – How to comply with your Environmental Permit (Version 6, June 2013) Environment Agency – Guidance on the Management of Landfill Gas

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	3.5 Know the requirements of on site verification and sampling of waste received	
Control of amenity emissions	4.1 Know how to prevent mud and other debris from contaminating the public highway 4.2 Know the procedures for dealing with noise, dust, odours and other nuisance arising from the site	Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009)
 S. General Landfill Management activities Vehicle management Surface water management Restoration Stable survey points 	 5.1 Know how to manage vehicles on a landfill site in line with WISH/HSE guidance 5.2 Know the implications of 'settlement' and 'compaction' within a landfill and the impact on restoration 5.3 Know the key indicators of surface water pollution from an inert landfill site 5.4 Know how to manage surface water arising within the site 5.5 Know the requirement for discharge controls 5.5 Know the requirements for establishing and maintaining a network of stable, permanent survey control stations 	 HSE – Workplace transport safety (published 05/13) HSE: Safe transport in the waste and recycling industry Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) GOV.UK LFD1 Understanding the Landfill Directive Environment Agency – LFGTGN 02 Monitoring of landfill leachate, groundwater and surface water. Environment Agency (archive) – Environmental Permitting Regulations: Inert Waste Guidance – cut and paste the following link: http://webarchive.nationalarchives.gov.uk/20140328084622/http:/cdn.environment-agency.gov.uk/geho0509bpwj-e-e.pdf
6. Monitoring	 6.1 Know the requirements for monitoring in and around an inert landfill 6.2 Know the difference between monitoring for compliance and operational performance 6.3 Know when landfill gas monitoring and assessment may be required for an inert landfill site 	 Environment Agency – LFGTGN 02 Monitoring of landfill leachate, groundwater and surface water. Environment Agency (archive) – Environmental Permitting Regulations: Inert Waste Guidance - cut and paste the following link: http://webarchive.nationalarchives.gov.uk/20140328084622/http:/cdn.environment-agency.gov.uk/geho0509bpwj-e-e.pdf Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009)
7. Records and reports	7.1 Know what records must be kept and for how long.7.2 Know what records must be submitted to the Regulator and how frequently7.3 Know the 'notifications requirements of permits	 GOV.UK How to comply with your environmental permit Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009)
8 Landfill closure and aftercare	8.1 Know why it is important to have an up to date closure and aftercare plan	Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009)

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	8.2 Know the procedure for progressing a landfill through definite closure to aftercare	•	GOV.UK Understanding the Landfill Directive LFD 1
Additional Sources of information:			

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Title:	LANDFILL: NON-HAZARDOUS WASTE (LNH)	
Syllabus areas	Learning Outcomes The candidate will be able to:	Source
 Background and Legislation Legislation Management system Finance 	31.1 Know the legislation relevant to landfill:	 https://www.gov.uk/government/publications/understanding-the-landfill-directive-lfd-1 https://www.gov.uk/government/publications/landfill-sector-technical-guidance https://www.gov.uk/government/publications/financial-provision-for-landfill
3. Site engineering	 3.1 Know the principles of 'containment' 2.2 Know the characteristics of liner and capping designs 3.3 Know the elements of site construction which require Regulator approval 	https://www.gov.uk/government/publications/our-approach-to-landfill- engineering-lfe1 https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance
3 Waste acceptance	 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 	 GOV UK Waste Acceptance at landfills Technical Guidance WM3: Waste Classification – guidance on the classification and assessment of waste. GOV.UK – Hazardous waste: consignment note- supplementary guidance

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4 Pollution sources - Landfill gas	 Asbestos 3.5 Know the requirements for on site verification and sampling of waste received 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, CO₂) 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 of landfill gas and manage gas field balancing 	 GOV.UK Environmental Permitting: Landfill sector technical guidance GOV.UK – Guidance on the management of landfill gas, LFTGN03 GOV.UK – Landfill: How to comply with your permit: Additional guidance GOV.UK LFTGN04: guidance for monitoring trace components in landfill gas.
5 Pollution sources - leachate	 5.1 Know the requirements for managing leachate 5.2 Know why leachate levels must be maintained below a 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 the requirements for a leachate recirculation system including infrastructure and precautions 5.6 Know what information should be in a hydrogeological risk assessment 	 Gov.UK: Guidance for the treatment of landfill leachate GOV.UK LFTGN02: guidance on monitoring of landfill leachate, groundwater and surface water GOV.UK – Landfill: How to comply with your permit: Additional guidance GOV.UK Hydrogeological risk assessment for landfill Environment Agency - Horizontal guidance Note H1 - Annex J 3. Additional guidance for hydrogeological risk assessments for landfills and the derivation of groundwater control levels and compliance limits (version 2.1, December 2011) Waste Acceptance at Landfills

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6	Control of amenity emissions Litter, mud and fire Noise, dust, odour	 7.1 Know what actions to take to control litter and when to use these controls 7.2 Know the control measures for reducing the risk of fires on site 7.3 Know the procedures for dealing with fires on site 7.4 Know how to prevent mud and other debris from contaminating the public highway 7.5 Know the procedures for dealing with noise, dust, odours and other nuisance arising from the site 	 Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) https://www.gov.uk/government/publications/landfill-sector-technical-guidance Environment Agency – Review and Investigation of deep-seated fires within landfill sites.
7	General landfill management activities Stability Settlement/ Compaction Vehicle management Cover Restoration	 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 	
8	Ground water and surface water monitoring	 8.1 Know the need for ground water and surface water monitoring in and around a landfill 8.2 Know the difference between monitoring for operational performance and permit compliance limits and subsequent actions 	 https://www.gov.uk/government/publications/monitoring-of-landfill-leachate-groundwater-and-surface-water-lftgn-02 Environment Agency - Horizontal guidance Note H1 - Annex J 3. Additional guidance for hydrogeological risk assessments for landfills and the derivation of groundwater control levels and compliance limits (version 2.1, December 2011)

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8	Records and reports	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.	 Environment Agency – How to comply with your environmental permit. V6 Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) Environment Agency – How to comply with your environmental permit. V6 Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) GOV.UK Hazardous waste: returns – supplementary guidance
9	Landfill closure and aftercare	 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 	 https://www.gov.uk/government/publications/understanding-the-landfill-directive-lfd-1 GOV.UK – How to surrender your Environmental Permit: landfill Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009)
11	 DSEAR Fire Vibration 	 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 	 HSE: Dangerous Substances Explosive Atmospheres Regulations Environment Agency – How to comply with your environmental permit: Additional guidance for Landfill (EPR5.02) (March 2009) HSE: Landfill fires – controlling the risk http://www.hse.gov.uk/vibration/wbv/risks.htm

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	impact of whole body vibration as a result of driving vehicles on landfill sites	
Additional Sources of information	<u>:</u>	

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Title:	e: METAL RECYCLING SITES (MRS)		
Syllabus areas	Learning Outcomes	Sources	
	The candidate will be able to:		
 Scrap Metal Dealers Act 2013 Applying for a licence Register of Licences Revoking licences Displaying licences Verifying suppliers identity Forms of payment Keeping records Offences 	31.6 Know who is responsible for issuing scrap metal licences 31.7 Know the difference between a site licence and a collectors licence 31.8 Know the definition of a 'suitable person' when applying for a site licence 31.9 Know how long a licence is valid for 31.10 Know under what circumstances a licence can be revoked or conditions imposed 31.11 Know the conditions that may be imposed on a licence 31.12 Know the information required for the Register of Licences 31.13 Know who to notify when a licence is no longer required, and by when 31.14 Know where site licences and collectors licences must be displayed 31.15 Know what information is required to verify a supplier's identity 31.16 Know what forms of payment are acceptable when paying for scrap metal 31.17 Know what records must be kept when receiving metal and disposing of metal 31.18 Know how long records for receipt/disposal of metal should be kept for 31.19 Know the offences under the Scrap Metal Dealers Act 2013	Scrap Metal Dealers Act 2013 Scrap Metal Dealers Act 2013 – Explanatory Notes	
2 Management and Storage	2.1 Know under what circumstances water can be lawfully discharged from a metal recycling site	Environment Agency – SR2008No21: Metal Recycling Site OR	
Discharge of surface water	2.2 Know how long waste can be stored under the	• Environment Agency – SR2011No2: Metal Recycling Site	
 Standard Rules Permit (SRP) 	Standard Rule Permit	Environment Agency – How to comply with your environmental	

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 Storage of oil and fuel Tank and bunds checks Spills and pollution prevention, Storage of compressed gas cylinders 	 2.3 Know the steps for dealing with waste received which is not authorised by the site permit 2.4 Know the infrastructure requirements for storage and treatment of different wastes on site, in accordance with Standard Rules and guidance 2.5 Know which treatment activities are allowed under a Standard Rule Permit and any that are specifically 	 permit (V6, June 2013) Environment Agency – Above Ground Oil Storage Tanks: PPG2 (August 2011) HSE – Orphaned compressed gas cylinders in the waste and recycling industries (published 07/13) The Waste Batteries and Accumulators (Amendment) Regulations 2015 	
	prohibited 2.6 Know the requirements for oil and fuel tank storage 2.7 Know the checks and maintenance requirements for tanks and bunded areas 2.8 Know how to deal with spillages of fuel and oils 2.9 Know the requirement for safe storage of compressed gas cylinders		
 Vehicle / plant and equipment PPE Role of banksmen Reduce effects of noise and vibrations 	 3.1 Know when high visibility clothing should be worn and why 3.2 Know how to reduce the effects of noise and vibration from the site 3.3 Know when and how a banksman should be used 	 HSE – Section 5: Vehicle Movements Environment Agency – How to comply with your environmental permit (V6, June 2013) HSE - Controlling vibration HSE – noise 	
 4. Hazardous Waste Types of hazardous waste, Recognition of hazardous waste using EWC Hazardous waste consignment 	 4.1 Know what wastes resulting from metal recycling site treatment are classified as hazardous 4.2 Know the correct List of Wastes (or EWC) codes for defining hazardous wastes 4.3 Know how long to keep hazardous wastes consignment notes 4.4 Know the paperwork needed for the disposal of hazardous waste 	 Environment Agency – Technical Guidance WM3: Hazardous Waste (1st edition, 2015) Environment Agency – Move hazardous waste Environment Agency – Hazardous Waste – Producers and Holders Environment Agency – Technical Guidance WM3: Hazardous Waste (1st edition, 2015) 	
Additional Sources of information: ■ British Metals Recycling Association (BMRA): http://www.recyclemetals.org/			

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Title:	TRANSFER: HAZARDOUS WASTE (TMH)	
Syllabus areas	Learning Outcomes	Source
	The candidate will be able to:	
 Classifying waste WM3 Waste Hierarchy WAC 	 1.1 Know how to determine if a mirror entry in the EWC is to be classified as non-hazardous or hazardous waste 1.2 Know the information sources which may be needed to determine if a waste has any hazard properties 1.3 Know how to apply the waste hierarchy to the management of any hazardous waste to be transferred to another facility 1.4 Know how to comply with the Waste Acceptance Criteria for waste which is to be transferred to a hazardous waste landfill 	 GOV.UK Classify different types of waste GOV.UK Hazardous Waste Classification Technical Guidance GOV.UK Waste Acceptance at Landfill GOV.UK Waste legislation and Regulations GOV.UK Guidance on applying the waste hierarchy to hazardous waste
2. Consignment procedures	2.1. Know the hazardous waste consignment process (including completion of consignment	 GOV.UK hazardous Waste- consignment notes GOV.UK Hazardous waste - carriers
Consignment process	notes)	GOV.UK Hazardous waste: rejected loads – supplementary guidance
 Consignment notes 	2.2. Know the actions required when hazardous	GOV.UK hazardous waste consignee returns
Producer and consignee	waste is incorrectly consigned	GOV.UK Hazardous waste consignees
returns	2.3. Know how to complete producer and	GOV.UK Hazardous waste – producers and holders
• Records	consignee returns (including where and when to send them)	GOV.UK: How to comply with your environmental permit.
	2.4. Know the requirements for keeping records of waste movements (including keeping an up to date site inventory)	
3. Waste pre-acceptance	3.1. Know the requirements for characterising	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and
	wastes in advance of their receipt and why it is	<u>non-hazardous waste</u> - Section 2.1 .1
Characterising waste	important	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and
	3.2. Know what information is required prior to accepting hazardous waste for transfer as part	non-hazardous waste - section 2.1.2
	of the pre-acceptance process	GOV.UK Hazardous waste: rejected loads – supplementary guidance
4. Waste acceptance	4.1. Know how to manage wastes as they are	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and
	received on site	non-hazardous waste - Section 2.1.1
Criteria	4.2. Know the requirements for managing wastes	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and

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•	Audit Trail	which fail to meet the acceptance criteria 4.3. Know the requirements for keeping an audit trail of wastes from pre-acceptance to removal off site and why it is important	 non-hazardous waste - section 2.1.2 GOV.UK Hazardous waste: rejected loads – supplementary guidance
5.	requirements Drainage Containers Labelling Segregation Separation Compatibility Testing	 5.1. Know the requirements for infrastructure on a transfer hazardous site 5.2. Know the requirements for containers used to store hazardous wastes 5.3. Know the requirements for labelling, waste segregation and separation on a transfer hazardous site 5.4. Know when compatibility testing would be required 5.5. Know the potential safeguards for managing the storage of combustible waste in order to prevent fire or to mitigate its effects 5.6. Know the information required regarding site drainage and its maintenance within a site 	 GOV.UK: How to comply with your environmental permit. GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste Section 2.1.3 HSE - HSG71 Chemical Warehousing (4th edition, 2009) CIRIA.org - containment systems for pollution prevention GOV.UK Hazardous Waste Classification Technical Guidance GOV.UK: Hazardous waste segregation and mixing GOV.UK Fire Prevention Plans WISH: Reducing Fire Risk at Waste Management Sites
6.	management Causes	 management system 6.1. Know the causes of incidents and accidents on a transfer hazardous site 6.2. Know how to prevent incidents and accidents on a transfer hazardous site 6.3. Know what to include in a formal accident management plan 	GOV.UK Hazardous waste management facilities: review of incidents GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste Section 2.8 GOV.UK How to comply with your environmental permit.
	ol ol	6.4. Know the actions an operator should take if staff or members of the public identify a potential area of non-compliance	
•	Training needs Hazardous substances	 7.1. Know how risk assessments can be used to identify training needs 7.2. Know what training waste operatives working on a transfer hazardous site should have 7.3. Know when health surveillance may be required for employees 7.4. Know the hazard labels, 7.5. Know the health and safety implications for hazard label on waste materials 	 HSE – Health and Safety Training: a brief guide (published 11/12) HSE – Health and safety training in waste management and recycling (published 11/13) HSE – Health and hazardous substances in waste and recycling GOV.UK Hazardous Waste Classification Technical Guidance

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7.6. Know the Hazard Properties (HP)codes potentially hazardous wastes and the	s for
implications for staff safety	

Additional Sources of information:

- Where the hazardous waste being handled is clinical waste, reference needs to be made to https://www.gov.uk/government/publications/clinical-waste-additional-guidance
- Where the hazardous waste being handled is aerosols, reference needs to be made to:
 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300897/geho1111bved-e-e.pdf

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Title:	TRA	NSFER: NON-HAZARDOUS WASTE (TSNH)
Syllabus areas	Learning Outcomes	Source
	The candidate will be able to:	
1. Classifying Waste	1.1 Know how to determine if a mirror entry in	GOV.UK Classify different types of waste
	the EWC is to be classified as non-	GOV.UK Waste Acceptance at Landfill
Non Hazardous mirror entries	hazardous or hazardous waste	GOV.UK Waste legislation and Regulations
Waste Acceptance Criteria	1.2 Know how to apply the waste hierarchy to	DEFRA: Waste Hierarchy Guidance
Waste Hierarchy	the management of any non-hazardous	• <u>GOV.UK SR2015No4</u>
	waste to be transferred for disposal or further treatment	• <u>GOV.UK SR2008 No1</u>
	1.3 Know how to comply with the Waste Acceptance Criteria for waste which is to be	
	transferred to landfill	
3. Waste acceptance	33.1Know how to manage wastes as they are	GOV.UK – How to comply with your environmental permit.
3. Waste acceptance	received on site	GOV.UK Business and commercial waste – Duty of Care
Checks required on Waste	33.2Know the checks required before wastes can	GOV.UK SR2015No4
Transfer Notes (WTN)	be accepted on site	• GOV.UK SR2008 No1
Non-compliant waste	33.3Know how to handle waste streams which	<u>GOV.OK SK2000 NOT</u>
	contain non-compliant waste and are to be	
	rejected	
	33.4Know who is responsible for describing and	
	classifying waste	
	33.5Know requirements for keeping an audit	
	trail of wastes from pre-acceptance to	
	removal off site and why it is important	
3. Site infrastructure	3.1 Know the requirements for infrastructure	GOV.UK –How to comply with your environmental permit
requirements	on a transfer non-hazardous site	Understanding permeable and impermeable surfaces: Technical report on surfacing
	3.2 Know the requirements for containers used	options and cost benefit analysis
Drainage	to store non-hazardous wastes	Above Ground Oil Storage Tanks: PPG 2 – August 2011 – Environment Agency
• Containers	3.3 Know the storage requirements for liquids	• <u>GOV.UK SR2015No4</u>
Secondary containment	in secondary containment systems 3.4 Know the potential safeguards for	• GOV.UK SR2008 No1
systems	managing the storage of combustible waste	GOV.UK Fire Prevention Plans
	in order to prevent fire or to mitigate its	WISH: Reducing Fire Risk at Waste Management Sites
	effects	
	3.5 Know the information required regarding	
	1 3.3 the information required regulating	

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		site drainage and its maintenance within a site management system	
4.	Incident and Accident Management Causes Prevention Plans	 4.1 Know the causes of incidents and accidents on a non-hazardous transfer site 4.2 Know how to prevent incidents and accidents on a non-hazardous transfer site 4.3 Know what to include in a formal accident management plan 4.4 Know actions an operator should take if staff or members of the public identify a potential area of non-compliance 	GOV.UK How to comply with your environmental permit GOV.UK SR2015No4 GOV.UK SR2008 No1
5.	Health and Safety	5.1. Know how risk assessments can be used to	HSE – Health and Safety Training: a brief guide (published 11/12) USE – Health and safety training in worth management and recycling (published)
•	Training needs	 identify training needs 5.2. Know what training waste operatives working on non-hazardous transfer sites should have 5.3. Know when health surveillance may be required for employees 	HSE – Health and safety training in waste management and recycling (published 11/13)
Ad	ditional Sources of information		

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Title:	TREATMENT	AND TRANSFER: HAZARDOUS WASTE (TMH)
Syllabus areas	Learning Outcomes	Source:
	The candidate will be able to:	
 Classifying waste WM3 Waste Hierarchy WAC 	 2.1 Know how to determine if a mirror entry in the EWC is to be classified as non-hazardous or hazardous waste 2.2 Know the information sources which may be needed to determine if a waste has any hazard properties 2.3 Know how to apply the waste hierarchy to the management of any residues created from any hazardous waste treatment on site or any waste being transferred to another facility 2.4 Know how to comply with the Waste Acceptance Criteria for waste generated by treatment processes prior to disposal in a hazardous waste landfill 	 GOV.UK Classify different types of waste GOV.UK Hazardous Waste Classification Technical Guidance GOV.UK Waste Acceptance at Landfill GOV.UK Waste legislation and Regulations GOV.UK Guidance on applying the waste hierarchy to hazardous waste
 Consignment procedures Consignment process Consignment notes Producer and consignee returns Records 	 2.5. Know the hazardous waste consignment process (including completion of consignment notes) 2.6. Know the actions required when hazardous waste is incorrectly consigned 2.7. Know how to complete producer and consignee returns (including where and when to send them) 2.8. Know the requirements for keeping records of waste movements (including keeping an up to date site inventory) 	 GOV.UK hazardous Waste- consignment notes GOV.UK Hazardous waste - carriers GOV.UK Hazardous waste: rejected loads – supplementary guidance GOV.UK hazardous waste consignee returns GOV.UK Hazardous waste consignees GOV.UK Hazardous waste – producers and holders GOV.UK: How to comply with your environmental permit.
Waste pre-acceptanceCharacterising waste	 3.1 Know the requirements for characterising wastes in advance of their receipt and why it is important 3.2 Know what information is required prior to accepting hazardous waste for treatment as part of the pre-acceptance process 	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste - Section 2.1 .1 GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste - section 2.1.2 GOV.UK Hazardous waste: rejected loads – supplementary guidance
6. Waste acceptance	4.1 Know how to manage wastes as they are received on site	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste Section 2.1 .1

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•	Criteria Audit Trail	 4.2 Know the requirements for managing wastes which fail to meet the acceptance criteria and are to be rejected 4.3 Know the requirements for keeping an audit trail of wastes from pre-acceptance to treatment and/or removal off site and why it is important 	GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste - section 2.1.2 GOV.UK Hazardous waste: rejected loads – supplementary guidance
8. •	Site infrastructure requirements Drainage Containers Labelling Segregation Separation Compatibility Testing	 5.1 Know the requirements for infrastructure on a treatment and transfer hazardous waste site 5.2 Know the requirements for containers used to store and treat hazardous wastes 5.3 Know the requirements for labelling, waste segregation and separation 5.4 Know when compatibility testing would be required 5.5 Know the potential safeguards for managing the storage of combustible waste in order to prevent fire or to mitigate its effects 5.6 Know the information required regarding site drainage and its maintenance within a site management system 	 GOV.UK: How to comply with your environmental permit. GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste Section 2.1.3 HSE - HSG71 Chemical Warehousing (4th edition, 2009) CIRIA.org - containment systems for pollution prevention GOV.UK Hazardous Waste Classification Technical Guidance GOV.UK: Hazardous waste segregation and mixing GOV.UK Fire Prevention Plans WISH: Reducing Fire Risk at Waste Management Sites
•	Incident and accident management Causes Prevention Plans	 6.1 Know the causes of incidents and accidents on a treatment and transfer hazardous site 6.2 Know how to prevent incidents and accidents on a treatment and transfer hazardous site 6.3 Know what to include in a formal accident management plan 6.4 Know the actions an operator should take if staff or members of the public identify a potential non-compliance 	 GOV.UK Hazardous waste management facilities: review of incidents GOV.UK Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste Section 2.8 GOV.UK How to comply with your environmental permit.
7	Health and Safety Training needs Hazardous substances	 7.1 Know how risk assessments can be used to identify training needs 7.2 Know what training waste operatives working on a treatment and transfer hazardous site should have 7.3 Know when health surveillance may be required for employees 	 HSE – Health and Safety Training: a brief guide (published 11/12) HSE – Health and safety training in waste management and recycling (published 11/13) HSE – Health and hazardous substances in waste and recycling GOV.UK Hazardous Waste Classification Technical Guidance

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7.4 Know the hazard labels 7.5 Know the health and safety implications for	
hazard label on waste materials 7.6 Know the Hazard Properties (HP) codes are for	
potentially hazardous wastes and of the implications for staff safety	

Additional Sources of information:

Where the hazardous waste being handled is clinical waste, reference needs to be made to https://www.gov.uk/government/publications/clinical-waste-additional-guidance Where the hazardous waste being handled is aerosols, reference needs to be made to

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300897/geho1111bved-e-e.pdf

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Title:		TREATMENT AND TRANSFER: NON-HAZARDOUS WASTE (TMNH)
Syl	labus areas	Learning Outcomes Source	
		The candidate will be able to:	
1.	Classifying Waste Non-hazardous mirror entries Waste Acceptance criteria Waste Hierarchy	 1.4 Know how to determine if a mirror entry in the EWC is to be classified as non-hazardous or hazardous waste 1.5 Know how to apply the waste hierarchy to the management of any residues created from any waste treatment or any waste to be transferred to another facility 1.6 Know how to comply with the Waste Acceptance Criteria for waste generated by treatment processes which is to be transferred to landfill GOV.UK Hazardous Waste Classificate GOV.UK Waste Acceptance at Landfield GOV.UK Waste Hierarchy Guidance GOV.UK SR2008 No3 GOV.UK SR2015 No 6 	ation Technical Guidance ill
4.	Waste acceptance Checks required on Waste Transfer Notes (WTN) Non-compliant waste	 a. Know how to manage wastes as they are received on site b. Know the checks required before wastes can be accepted on site c. Know how to handle waste streams which contain non-compliant waste and are to be rejected d. Know who is responsible for describing and classifying the waste e. Know requirements for keeping an audit trail of wastes from pre-acceptance to treatment and/or removal off site f. Know when additional requirements for preacceptance checks should be applied 	•
3. •	Drainage Containers Secondary containment systems	 3.7 Know the requirements for infrastructure in areas where treatment of non-hazardous wastes takes place 3.8 Know the requirements for containers used to store non-hazardous wastes 3.9 Wight in the interval of the interval	ermeable surfaces: Technical report on nalysis PG 2 – August 2011 – Environment Agency

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	secondary containment systems 3.10 Know the potential safeguards for managing the storage of combustible waste in order to prevent fire or to mitigate its effects 3.11 Know the information required regarding site drainage and its maintenance within a site management system	non-hazardous waste
 4 Incident and Accident Management Causes Prevention Plans 	 4.1. Know the causes of incidents and accidents on a non-hazardous treatment and transfer site 4.2. Know how to prevent incidents and accidents on a non-hazardous treatment and transfer site 4.3. Know what to include in a formal accident management plan 4.4. Know actions an operator should take if staff or members of the public identify a potential area of non-compliance 	GOV.UK How to comply with your environmental permit
 Health and safety Training needs Additional Sources of information	 5.4. Know how risk assessments can be used to identify training needs 5.5. Know what training waste operatives working on non-hazardous treatment and transfer sites should have 5.6. Know when health surveillance may be required for employees 	 HSE – Health and Safety Training: a brief guide (published 11/12) HSE – Health and safety training in waste management and recycling (published 11/13)

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Title:	WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)	
Syllabus areas	Learning Outcomes The candidate will be able to:	Sources
 Storage areas Impermeable surfaces Weatherproofing Treatment 35. Managing fluids in WEEE materials	34.1 Know the storage requirements for WEEE prior to treatment 34.2 Know the technical requirements for sites undertaking WEEE treatment operations 34.3 Know the characteristics of impermeable surfaces used in WEEE treatment facilities 34.4 Know why weatherproof coverings are used by WEEE treatment facilities 2.1 Know the requirements for treating and storing WEEE materials that contain fluids	 Defra – Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE) (November 2006) To access this document cut and paste into a search engine directly! http://webarchive.nationalarchives.gov.uk/20130402151656/http://archive.defra.gov.uk/environment/waste/producer/electrical/documents/weee-batrrt-guidance.pdf Defra – Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE)
 3. Handling hazardous WEEE Classification Consignment 	3.1 Know the WEEE components classified as hazardous waste 3.2 Know the consignment procedures for hazardous WEEE	 (November 2006) Environment Agency – Technical Guidance WM3: Interpretation of the definition and classification of hazardous waste (1st edition, August 2015) Classification of Different Types of Waste Hazardous waste - GOV.UK Environment Agency - Consignee Returns – records Environment Agency – Consignment notes Hazardous Waste (England and Wales) Regulations 2005 Hazardous Waste (England and Wales) (Amendment) Regulations 2009
 WEEE Treatment Treatment Guidelines/ Good practice Removal of specific items Weighing WEEE Quality of WEEE derived materials Contamination 	 4.1 Know the permitting arrangements for a facility treating WEEE 4.2 Know the items that must be removed from WEEE during treatment 4.3 Know the items that must be safely removed as whole items from any separately collected WEEE 4.4 Know the requirements for weighing WEEE prior to and after treatment 4.5 Know good practice for maximising the quality of WEEE derived materials 	 Defra – Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE)(November 2006) BIS – WEEE Regulations 2013: Government Guidance Notes(March 2014) WRAP – Treatment of WEEE WRAP – Waste Treatment

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Separately collected WEEE	4.6 Know good practice for identifying and removing contaminated/non-conforming wastes from the WEEE	
 WEEE items for reuse Items for reuse Quality standards Good practice 	 5.1 Know the items which can be separated for reuse 5.2 Know the quality standards for the reuse of WEEE 5.3 Know good practice for the disassembly and storage of WEEE to increase potential for reuse 5.4 Know good practice for testing WEEE items for reuse 	 WRAP – The benefits of PAS 141 Defra – Guidance on Best Available Treatment Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE) (November 2006) WRAP – Treatment for Reuse
6. Exporting of WEEELegislationPermitsApprovals	 6.1 Know the circumstances where approval for exporting obligated WEEE is required 6.2 Know the permits, approvals and information required to export WEEE 6.3 Know legislation and regulations applicable to exporting WEEE 	 Environment Agency - Guidance note for approval as an approved authorised treatment facility (AATF) or approved exporter (AE) for waste electrical and electronic equipment (WEEE) (WMP7)(V6, July 2012) GOV. UK – Waste electrical and electronic equipment (WEEE): Exporting
7. Handle WEEE safely	7.1 Know the hazards associated with handling hazardous WEEE items	HSE Guidance – Waste Electrical and Electronic Equipment Recycling
8. WEEE evidence	8.1 Know the type of facility that can issue WEEE evidence	Waste electrical and electronic equipment (WEEE): reuse and treatment - Detailed guidance - GOV.UK
Sources of information: EPR 2010 and amendments WEEE Regulations and WEEE Directive		

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