

Qualifications

Version 5, September 2023

CIWM (WAMITAB) Level 4 Operator Competence for Managing Thermal Treatment Facilities

Qualification Code: 601/8620/3 CIWM Code: pyrolysis and gasification (hazardous waste) AOC01a, autoclaving (hazardous waste) AOC01b, pyrolysis and gasification (nonhazardous waste) AOC01c, autoclaving (non-hazardous waste) AOC01d Guided Learning Hours: 68 Total Qualification Time: 189

Together, we stand for a world beyond waste



About CIWM and this Handbook

About CIWM

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

As the leading professional body for resource and waste professionals, CIWM (Chartered Institution of Wastes Management) is the voice of the sector and represents over 5,500 individuals in the UK and overseas.

CIWM has a unique understanding of the sector. Our professional knowledge and trusted reputation enables us to inform and influence legislation and policy, playing a vital part in shaping the future role and reputation of the sector.

Equal Opportunities

CIWM supports the principles of equal opportunities, and we are committed to meeting these principles in the provision of all our qualifications and assessments. We firmly believe that all learners and stakeholders are therefore entitled to receive equal treatment irrespective of age, sex, race, marital status, religion, disability, or sexual orientation.

The Purpose of this Qualification Handbook

Welcome to your CIWM Qualification Handbook. This will help you to complete your qualification. It contains:

- The units you need to achieve to complete your qualification.
- Information about your responsibilities as a candidate.
- Reference information covering each learning outcome and assessment criteria.



Candidate Information

Name **CIWM Learner Number Registration Date Enrolment Date Centre Name Centre Address Centre Contact Tutor Name**



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Frequently Asked Questions

What is a regulated qualification?

A regulated qualification demonstrates that you have the knowledge, skills and/or understanding to meet the standards expected by employers in your industry. Your qualification is recognised by CIWM and one or more of the educational regulators across the UK.

What is the objective of this qualification?

This qualification is part of the CIWM/WAMITAB Operator Competence Scheme and is designed to provide technically competent people with the knowledge and skills to ensure waste sites comply with either:

- Environmental Permitting Regulations (England and Wales) 2007
- The Waste Management Licensing (Amendment) Regulations (Northern Ireland) 2015

Achievement of this qualification demonstrates competence by the learner to manage permitted waste facilities in England, Wales and Northern Ireland.

Who is it for?

- Technically competent managers (TCM)
- Consultants
- Site managers and supervisors

What are the entry requirements of this qualification?

This qualification is open entry. This means that learners interested in undertaking this qualification do not require any other qualifications or levels of attainment in order to take this qualification.

What job role could this qualification lead to or support?

This qualification is ideal for new or experienced people managing waste and resource management operations that require evidence of their competence, knowledge and skills to ensure waste sites comply with the relevant legislation in England, Wales or Northern Ireland. Once you have achieved your Operator Competence qualification, you will be required to pass a Continuing Competence assessment every two years if you wish to act as the recognised technically competent manager (TCM) on a waste site. All TCM's must be able to demonstrate that they have kept their knowledge and skills up to date.

What do I need to achieve?

To achieve this qualification, you will need to complete the following units.

Mandatory Unit Group – learners must complete all the units from the following group, before selecting a pathway:

- Maintain health and safety in the waste and resource management industry (OCS01)
- Manage the environmental impact of work activities (OCS02)
- Manage the movement, sorting and storage of waste (OCS05)
- Control work activities on a waste management facility (OC\$06)



- Identify and implement improvements to waste management operations (OCS07)
- Control maintenance and other engineering operations (OCS08)
- Procedural compliance (OC\$09)
- Manage and maintain systems for responding to emergencies (OC\$10)
- Manage an inspection visit at your site from regulatory bodies (OCS65)

Pyrolysis and Gasification Hazardous Waste Pathway – learners that select this pathway must complete all the units from the following group:

- Manage the reception of hazardous waste (OCS11)
- Manage site operations at a gasification and pyrolysis waste thermal treatment facility (OC\$54)
- Managing transfer and disposal from hazardous waste thermal treatment options (OCS56)

Autoclaving Hazardous Waste Pathway – learners that select this pathway must complete all the units from the following group:

- Manage the reception of hazardous waste (OCS11)
- Manage site operations at an autoclaving waste thermal treatment facility (OC\$55)
- Managing transfer and disposal from hazardous waste thermal treatment options (OC\$56)

Pyrolysis and Gasification Non-Hazardous Waste Pathway – learners that select this pathway must complete all the units from the following group:

- Manage the reception of non-hazardous waste (OCS12)
- Manage site operations at a gasification and pyrolysis waste thermal treatment facility (OC\$54)
- Manage transfer and disposal from non-hazardous waste thermal treatment operations (OC\$58)

Autoclaving Non-Hazardous Waste Pathway – learners that select this pathway must complete all the units from the following group:

- Manage the reception of non-hazardous waste (OCS12)
- Manage site operations at an autoclaving waste thermal treatment facility (OC\$55)
- Manage transfer and disposal from non-hazardous waste thermal treatment operations (OC\$58)

What is a unit?

The units of a qualification describe what you must be able to do and understand to perform work activities competently in your job role.

- Learning outcomes: describe what tasks you will be able to do as a result of learning.
- Assessment criteria: describe what activities you will need to do and what you must know to complete each task.

What is a CIWM (WAMITAB) Qualifications Centre?

You will gain your qualification through a CIWM (WAMITAB) Qualifications Centre. It may be your place of work, a local college or training provider. Assessment of your qualification will be carried out at your place of work and the centre is responsible for the administration. Centre staff will therefore:

• Register you with CIWM.



- Provide a registration number.
- Apply for your certificate when you have completed your qualification or units.

How long will it take?

You have two years to complete your qualification from the date of registration, but your centre may have some requirements that they will explain to you.

Who will help me achieve my qualification?

The following people at the CIWM (WAMITAB) Qualifications Centre will help you to achieve your qualification:

Your Assessor

The assessor is the person you will have the most contact with as you work towards your qualification. They will:

- Help you identify any training you need.
- Help you plan your workload and organise your evidence.
- Observe you carrying out your job in the workplace over a period of time.
- Ask questions about the work you do.
- Make decisions about your evidence.
- Judge when you are competent.
- Provide feedback.

Internal Quality Assurer

The internal quality assurer maintains the quality of assessment within the centre.

External Quality Assurer

An external quality assurer is employed by CIWM to ensure that your centre meets the required national standards for quality and assessment.

What are my responsibilities as a learner?

You will need to:

- Provide your centre with your personal details so they can register you with CIWM
- Comply with health and safety law and regulations

What steps will I need to take to complete my qualification?

- 1. **Planning:** Your assessor will tell you about the mandatory units of the qualification and will help you to select relevant optional units.
- 2. **Evidence:** You will gather evidence for your portfolio (see next question for types of evidence).
- 3. **Feedback:** Your assessor will provide regular feedback on your progress and will arrange for additional training if needed. When your assessor confirms you are competent after an assessment, it will be recorded in your handbook.
- 4. Achievement: Once you have completed all the units and gathered all the evidence you need, your centre will apply for your CIWM certificate.

What are the evidence requirements for this qualification?

The primary sources of evidence for this qualification are:



Observation (O): Direct observation or witness testimony where direct observation is not possible. Where this evidence type has been suggested against Assessment Criteria which require the candidate to explain or describe, the assessor must hear or observe the explanation/description (directly or being delivered to others) or see it in writing. The assessor must not infer that the candidate can explain/describe based purely on observation.

Question and Answer (Q/A): candidate statements, verbal questioning, professional discussion, written questions, product evidence supported by questioning

Simulation / Realistic working environment (S/R): Should be used as a last resort where allowed. Please see the Energy and Utility Skills Assessment Strategy for further information.

Where do I go if I need more information about my qualification and assessments?

- Your assessor
- Your qualification workbook
- CIWM



Useful Words

Instructional verbs	Definition		
Assessment Criteria	These specify the standard that you are expected to meet to demonstrate that you have achieved the Learning		
	Outcome. Assessment criteria are detailed enough to allow judgments to be made about your competence.		
Awarding Organisation	To have a qualification recognised in the UK it must be accredited through an awarding body. These		
	organisations are regulated by Ofqual in England, Qualifications Wales, CCEA in Northern Ireland and SQA in		
	Scotland to ensure that you receive a high quality, recognised qualification upon completion of the course.		
CIWM	An Awarding Organisation for a wide range of qualifications in waste management and recycling, cleaning and		
	street cleansing, facilities management, and parking. CIWM is responsible for ensuring the on-going quality of the		
	delivery and assessment of qualifications, and issues certificates to learners upon completion. We have over 25		
	years of experience developing and quality assuring qualifications, training, and course materials.		
CIWM (WAMITAB) Qualifications	These centres are training organisations that have met our strict quality standards and have been approved to		
Centre	deliver our qualifications to learners. They include private providers, colleges of further education, employers, and		
	prisons.		
Competence Competence, in relation to the qualification, describes your ability to consistently be able to und			
	activities, know and understand work-related tasks as per the requirements set out in the standards.		
Learner	A person who is registered to work towards achievement of a qualification – i.e. you!		
Learning Outcome These set out what you will be expected to know, understand or be able to do. Each learning outcome			
	one or more assessment criteria, and together they set a clear assessment standard for each unit.		
Multiple Choice Tests	A form of assessment where learners are asked to select the best possible answer from the list provided.		
Tutor	A person employed to instruct an individual or small group on a particular topic. Tutors that deliver knowledge		
	and understanding qualifications and units should have relevant competence and experience in the subject that		
	they are delivering and have experience of delivering vocational learning.		
Units – Mandatory and Optional	Units form the building blocks of all qualifications that are nationally regulated on the Qualification Credit		
	Framework. Units are small chunks of learning that focus on specific aspects of knowledge, skills and		
	understanding.		
	Mandatory units are those that you must achieve, and Optional units offer a range of subjects that you may		
	choose between.		
Vocational	A qualification is vocational when it relates directly to the skills, knowledge and understanding required to		
	undertake a specific or broad job role.		



Unit Terms

Instructional verbs	Definition	
Adapt	To change something to make suitable for new purpose.	
Advise	To inform someone about a fact or situation formally or officially.	
Analyse	To look at something (e.g. a process) and use given classifications or principles to gain a further understanding.	
Apply	To put something into action. A "doing" task which requires "real" evidence from a workplace scenario.	
Assess	To offer a reasoned judgement of the standard, quality of situation or ability informed by relevant facts.	
Brief	To instruct or inform someone thoroughly to prepare them.	
Carry out	To undertake an activity of a practical nature.	
Check	To verify or establish. To examine something in order to confirm its accuracy, quality or condition.	
Collect	To bring or gather together.	
Communicate	To share or exchange information, news or ideas by speech, writing etc	
Compare	To look at the characteristics of an item or activity and note the similarities and differences.	
Complete	To finish.	
Comply	To act in accordance with specified standards or requirements.	
Conduct	To do or carry out.	
Confirm	To check if something is true, correct, completed or in place.	
Consult	Donsult To seek information or advice from an expert or professional. To have discussions with someone before	
	undertaking a course of action.	
Critically Compare	To look at the characteristics of an item or situation, note the similarities and differences and their respective	
	positive and negative aspects. In some cases, this can include the use of the comparison in context as the basis	
	for decision making.	
Define	Provide a generally recognised or accepted definition.	
Demonstrate	To clearly show e.g. by practical exhibition (in real time) and/or historic evidence. These would normally be	
	accompanied by an explanation.	
Describe	Provide a vivid picture of what it is by using imagery, adjectives and adverbs to make the subject easy to	
	understand. It may also convey an idea or fact.	
Determine	To find out or decide e.g. what is relevant. To find a solution by following a set of procedures. To calculate a	
	numeric value.	
Develop	Build a process or activity or understanding either from scratch or using an existing product to create something	
	workable.	
Differentiate/ Distinguish	To look at the characteristics of an item or situation/activity and explain the differences.	



Discuss	To give an account that addresses a range of ideas and arguments.	
Ensure	To make certain that something will occur or is the case.	
Establish	To set up.	
Evaluate/ Justify	To look at whatever the required content/process is and suggest other relevant, significant or possible outcomes. It is the process of exploring, checking and suggesting a likely outcome with reasons.	
Examine	To look at, inspect or scrutinise carefully.	
Explain	To provide a comprehensive answer that shows an understanding of the content/process mentioned. The answer should include: what it is, how it works, what it looks like, what it does, how it happens, why it happens and any relevant reasons.	
Follow	To be guided by instructions.	
Give	To supply/provide without explanation.	
Identify	This requires the learner to list and describe what is required or relevant to produce an outcome, or requires the learner to make choices to achieve a particular aspect of their job. At Level 4, this would require the learner to say what is available, make the choice and then to explain or justify why the choice was made.	
Implement	To put something into practice after the development process has taken place. This ensures that the product/process is actually employed and/or used by self and others during work activities.	
Inform	To give someone facts or information.	
Кеер	To have or retain possession of something.	
List	To produce a number of relevant items which apply to the question. Further description is not required.	
Maintain	To enable something to continue. To keep something in good condition.	
Make	To create, produce or form something.	
Manage	After a development process ensure that the product/process works using relevant management techniques.	
Minimise	To reduce something to the smallest possible amount or degree.	
Monitor	To check if a process or activity is carried out correctly.	
Notify	To inform someone of something in a formal or official manner.	
Obtain	Acquire.	
Organise	To arrange systematically. To coordinate activities. To make arrangements or preparations.	
Outline	A description setting out main characteristics or points.	
Plan	To consider, set out and communicate what needs to be done.	
Prepare	To make ready for use or consideration. To create in advance.	
Process	A systematic series of actions.	
Produce	To create, manufacture or make something.	
Promote	To support or actively encourage. To further progress.	
Propose	To put forward an idea, plan or suggestion for consideration.	



Provide	To make available or supply.
Recognise	To be aware of, familiar with and able to identify an activity or product.
Recommend	To suggest or put something forward as being suitable for a particular purpose or role with reasons why.
Rectify	To correct or put right.
Refer	To pass the matter to the responsible person for a decision.
Reflect	To look back upon and appraise.
Report	To prepare a detailed account or statement about an event or topic.
Request	To formally ask for something.
Research	To investigate/study to establish facts and reach a conclusion.
Resolve	To settle or find a solution to a problem.
Respond	To react quickly or positively to something.
Review	To formally assess something with the intension of instituting change if required.
Secure	To obtain something e.g. commitment from colleagues.
Seek	To ask for something from someone.
Select	To carefully choose the most suitable option for a task/purpose.
Set up	To prepare a system or set of equipment for operation.
Specify	To state a fact or requirement clearly and precisely.
State	To express something definitely or clearly in speech or writing.
Suggest	To give possible alternatives, produce or put forward an idea/plan.
Summarise	To give a brief statement in your own words of the main points.
Take action/ measures/ steps	To do something to achieve an aim or deal with a problem.
Train	To teach a person a particular skill or type of behaviour through practice and instruction.
Undertake	To take part in or carry out an activity/task.
Use	To apply information or prior learning. To put into service or action. To employ for a given purpose.



SECTION 1 – Mandatory Unit Group

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Maintain health and safety in the waste and resource management industry (OCS01)

Level: 4		Evidence	Portfolio Ref	Comments
Learning Outcome	Assessment Criteria	Туре	No	
1. Know the requirements of	1.1. Explain the main legal requirements of health and safety legislation on waste and			
health and safety	resource management facilities, in relation			
legislation in the waste and resource	to: • employers			
management	 employees 			
industry.	• others			
	1.2. Describe the different sources of reliable health and safety information.			
	1.3. Identify how to locate current health and safety information.			
	1.4. Describe the main features and legal requirements for:			
	 fire risk assessment 			
	 Plan for managing emergencies CoSHH 			
	PUWER			
	LOLER			
	• DSEAR			
2. Understand the	2.1. Explain the difference between a hazard			
hazards, risks, control	and a risk.			
measures and	2.2. Explain how to complete a risk assessment.			
monitoring associated	2.3. Explain the difference between a formal			
with a waste and	and dynamic risk assessment.			
resource	2.4. Explain the hierarchy of 'control measures'.			
management	2.5. Describe the characteristics of hazardous			
environment.	substances and their warning labels.			



		2.6. State the types of personal protective	
		equipment (PPE) required and how they	
		must be used, maintained, and stored.	
		2.7. Identify the main causes of accidents and	
		incidents in the workplace.	
		2.8. Explain how to carry out an accident and	
		incident investigation in line with current	
		regulator guidance.	
3.	Be able to make sure	3.1. Conduct a risk assessment and implement	
	that hazards and risks	the control measures.	
	are controlled safely	3.2. Maintain accurate records of workplace	
	and effectively on	irregularities.	
	site.	3.3. Check other people are aware of	
		hazards/risks and the actions to minimise	
		them.	
		3.4. Identify the relevant person in the	
		workplace to whom hazards should be	
		reported.	
		3.5. Confirm that precautions to control risks	
		have been agreed with the people	
		responsible for health and safety on site.	
		3.6. Review to make sure all recommended	
		actions have been taken.	
4.	Be able to implement	4.1. Implement workplace health and safety	
	organisational health	procedures in relation to:	
	and safety	 safe use of plant, machinery, and 	
	procedures on site.	equipment	
		 safe use of chemicals 	
		fire risk	
		 first aid 	
1		 supervision of visitors and contractors 	
		 vehicle movements 	
		 any other site-specific hazards as 	
		detailed on risk assessments	



	4.2. Ensure procedures are in place to check the health and safety competence of employees.	
	4.3. Conduct monitoring of the workplace at agreed intervals and in accordance with workplace instructions.	
	4.4. Respond to any breaches of health and safety.	
	4.5. Identify training needs for self and others and put plans in place to address them.	
5. Be able to monitor and review safety on	5.1 Review performance of health and safety on site.	
site.	5.2 Request feedback on health and safety performance from relevant people.	
	5.3 Make recommendations for any changes to organisational procedures to maintain health and safety on site.	



Manage the environmental impact of work activities (OC\$02)

Le	vel: 4		Evidence	Portfolio Ref	Comments
Le	arning Outcome	Assessment Criteria	Туре	No	
1.	Understand the legal and organisational requirements for managing the environmental impact of work activities.	 1.1. Describe the legislative requirements, codes of practice and guidance applicable to the transfer and transport of waste from the site. 1.2. Explain the organisational procedures for managing the environmental 			
		impact of work activities.			
2.	the environmental impact of work activities	2.1. Explain how to assess the impact of work activities and resources in the environment, including risk analysis.			
	and how this can be minimised.	2.2. Explain what specialist advice is available to manage the environmental impact of work activities.			
		2.3. Explain how to minimise the environmental impact of work activities.			
		2.4. Explain how to monitor the environmental impact of work activities.			
3.	Understand the legal and organisational requirements for	3.1. Explain the legal requirements and current guidance for managing the risk of fires on site.			
	managing the risk of fires on site.	3.2. Explain the organisational procedures for managing the risk of fires on site.			
4.	Be able to assess and report on the environmental impact of	 4.1. Assess the environmental impact on your site of: work activities resource use 			



	work activities in own area of responsibility.	 4.2. Review existing control measures for minimising site environmental impacts of: work activities resource use 4.3. Analyse the effectiveness of the existing control measures and make recommendations for any improvements including those for: work activities resource use 4.4. Produce a report on the environmental impact of work activities and resource
5.	Be able to organise work activities and resource	use, with recommendations for improvement. 5.1. Organise resources in own area of responsibility to reduce environmental
	use to minimise environmental impact.	impact. 5.2. Organise work activities in own area of responsibility to reduce environmental impact.
6.	Be able to promote on- going improvement in environmental performance.	6.1. Monitor the environmental impact of work activities. 6.2. Establish ways to identify and report opportunities for improving environmental performance. 6.3. Communicate on-going environmental performance. 6.3. Communicate on-going environmental performance.
7.	Be able to implement fire prevention controls and measures on site.	7.1. Identify the types and locations of combustible and flammable materials on site.



7.4. Review the effectiveness of the existing control measures and make recommendations for any improvements.	
7.5. Ensure control measures are implemented on site to reduce the risk of fire.	



Manage the movement, sorting and storage of waste (OC\$05)

Level: 4	Assessment Criteria	Evidence Type	Portfolio Ref No	Comments
Learning Outcome 1. Understand the specific regulation, procedures and requirements for the movement, sorting and storage of waste.	 1.1. Describe the legislative requirements, codes of practice and guidance applicable to the movement, sorting and storage of waste from the site. 1.2. Describe the legislative requirements and organisational procedures for dealing with unauthorised wastes. 1.3. Describe the records required by legislation for the movement, sorting and storage of waste on site. 1.4. Describe the planning permission, permit and environmental management system (EMS) for the site. 1.5. Describe the types, functions and 			
	limitations of waste handling equipment used on site. 1.6. Describe the procedures and handling requirements for the types of waste received on site. 1.7. Describe the procedures for managing			
	 work activities during the movement, sorting and storage of waste on site. 1.8. Describe the procedures for managing internal site traffic during the movement, sorting and storage of waste on site. 1.9. Describe the procedures for preventing fires during the movement, sorting and storage of waste on site. 			



2. Understand the health, safety and environmental implications of movement, segregation and storage of waste.	 2.1. Describe the organisational environmental policy and procedures applicable to the site. 2.2. Identify hazards associated with the movement, sorting and storage of waste on site in relation to: health and safety environment 2.3. Describe the process of risk analysis to minimise hazards to personnel and the environment. 2.4. Describe the lifting and handling techniques suitable for moving, sorting and storing wastes on site. 2.5. Describe the organisational procedures for dealing with spillages and emissions on site. 2.6. Describe the organisational procedures for dealing with fires on site. 2.7. State the types of personal protective equipment (PPE) required and how they must be used, maintained and stored. 2.8. Describe the importance of personnel compliance with health and safety requirements for: use of personal protective equipment (PPE) use of vehicles, plant and machinery 	
	 use of waste handling equipment 	
3. Be able to implement systems and procedures to manage the	3.1 Implement systems and procedures for the movement, sorting and storage of waste in accordance with legislative	



movement, sorting and	requirements and organisational	
storage of waste.	procedures.	
	3.2 Implement systems and procedures that	
	comply with legislative requirements to	
	deal with wastes that need specific	
	handling.	
	3.3 Comply with legislative requirements	
	and organisational procedures for	
	recording and reporting risks to health,	
	safety or the environment.	
	3.4 Implement recording and information	
	systems for the sorting and storage of waste	
	in accordance with legislative requirements	
	and organisational procedures.	
	3.5 Ensure that personnel understand the	
	procedures relating to the movement,	
	sorting and storage of wastes and comply	
	with them.	
	3.6 Ensure that personnel have received	
	recognised training before any machinery,	
	plant or equipment is used.	
4. Be able to manage	4.1 Identify hazards and minimise risks to	
vehicles, plant and crews on	health, safety and the environment that	
sites which handle waste.	arise from the use of vehicles and plant on	
	the site.	
	4.2 Establish systems to control the	
	movement of vehicles and plant on site to	
	comply with health, safety and	
	organisational requirements.	
	4.3 Implement and enforce organisational	
	procedure to generate site rules for	
	vehicles, plant and crews on the site that	
	comply with legislative requirements and	
	organisational procedures.	



5. Be able to use, record and	5.1 Give instructions for moving, sorting and	
communicate information.	storage of waste in accordance with	
	organisational procedures.	
	5.2 Maintain records and provide	
	information for the moving, sorting and	
	storage of waste.	
	5.3 Inform site personnel of all procedures	
	for onsite activities to maintain the quality	
	of the organisation's work.	
	5.4 Monitor and review the work	
	programme and instructions to ensure	
	accuracy.	
	5.5 Communicate work instructions verbally	
	and in writing.	
	5.6 Check that employees have	
	understood work instructions.	
	5.7 Advise relevant people about	
	accidents, incidents, interruptions to work,	
	near hits and/or any situations that require	
	their attention.	
	5.8 Maintain a record of training for all staff	
	employed on the site.	
6. Be able to resolve problems	6.1 Recommend steps to rectify any staff	
which arise during or resulting	shortages, equipment deficiencies or	
from the movement, sorting	external factors that prevent the	
and storage of waste.	movement, sorting or storage of wastes.	
	6.2 Seek specialist advice to resolve	
	situations which arise outside own area of	
	responsibility.	
	6.3 Implement procedures for dealing with	
	spillages on site and ensure staff	
	compliance.	



Control work activities on a waste management facility (OCS06)

Level: 4			Portfolio Ref	Comments
Learning Outcome	Assessment Criteria	Evidence Type	No	Continents
 Understand the underpinning legislative requirements and organisational procedures for managing waste operations. 	 1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to safety, health and the environment for waste management operations. 1.2. State the types of personal protective equipment (PPE) required and how they must be used, maintained and stored. 1.3. Describe the legislative requirements and organisational procedures for dealing with unauthorised wastes. 1.4. Describe the organisational environmental policy and procedures applicable to the site. 1.5. Describe risk analysis to minimise hazards to personnel and the environment for the whole workplace. 			
2. Understand how to control work activities in accordance with legislative requirements and organisational procedures.	 2.1. Describe the organisation's objectives and targets for the waste facility. 2.2. Describe the organisational procedures for managing work activities and personnel on site. 2.3. Explain why it is important to ensure that personnel follow organisational procedures. 2.4. Describe the records required by legislation and organisational procedures in relation to work activities on the waste facility. 			



	 2.5. Explain how to identify, rectify and record discrepancies and defects arising from site activities. 2.6. Explain why it is important to have planning permission, a permit and an environmental management system (EMS) for the site. 2.7. Describe how to report accidents and incidents that arise on site. 2.8. Explain why it is important to monitor compliance with work instructions, how to do this and how to respond to incidents of non-compliance. 	
3. Understand how to use and communicate data and information.	 3.1. Describe how to communicate work instructions to personnel verbally and in writing. 3.2. Explain why it is important to ensure each individual understands work instructions and how to do this. 3.3. Describe the types of information required for the completion of paperwork regarding site activities. 	
4. Be able to control work activities on a waste facility.	 4.1. Implement and monitor work programmes which meet the legislative requirements and organisational procedures required for site activities, including: safe systems of work risk assessment personal performance 4.2. Ensure that work instructions comply with legislative requirements and organisational procedures. 4.3. Confirm that personnel understand and comply with work instructions in accordance with legislative 	



	requirements and organisational	
	procedures.	
	4.4. Implement training for personnel before using any machinery, plant or equipment.	
	4.5. Ensure that the resources necessary and personnel with the required skills are available.	
	 4.6. Carry out risk assessment to identify potential hazards and take steps to reduce risks to personnel and the environment related to wastes which: are difficult to handle may contain disguised materials or unacceptable components are unauthorised are likely to cause health problems 	
5. Be able to use and communicate data and information on a waste	5.1. Communicate the work programmes and operational instructions verbally and in writing.	
facility.	5.2. Confirm that all personnel have understood the work programmes and operational instructions.	
	5.3. Maintain records of site activities in accordance with legislative and organisational requirements.	
	5.4. Advise relevant people about accidents, incidents, interruptions to work or any situations that require their attention.	
	5.5. Maintain records of training for all staff employed on the site.	
6. Be able to resolve problems that may arise	6.1. Rectify any personnel or equipment deficiencies or external causes that	



when controlling work activities on a waste	prevent the site activities from being carried out.	
facility.	6.2. Report problems to relevant person in accordance with organisational procedures.	
	6.3. Implement procedures for dealing with spillages on site and ensure that personnel understand and follow the prescribed procedures.	
	6.4. Recommend solutions for any breaches of legislative conditions revealed during routine inspections of the site.	



Identify and implement improvements to waste management operations (OCS07)

Level: 4 Learning Outcome	Assessment Criteria	Evidence Type	Portfolio Ref No	Comments
 Know how to identify improvements to waste management operations. 	 Assessment Cineria 1.1. Explain how recent developments in technology and operating procedures could impact the waste management industry. 1.2. Identify improvement to waste management operations. 1.3. Describe the proposed improvement in terms of strengths, weaknesses, opportunities and threats. 1.4. State the existing operating costs, and how costs are broken down, for the area of proposed improvement. 			
	 1.5. State the costs of proposed improvements in terms of: capital installation running costs 			
2. Know how to implement improvements to waste management operations.	 2.1. Describe techniques used in preparing proposals. 2.2. Explain the impact of the potential improvement on other aspects of activities. 2.3. Describe the reporting procedures in terms of: project approval monitoring implementation evaluation of project outcomes 			



		2.4. Explain how to monitor the implementation of an improvement plan, including any problems experienced and the steps that could be taken to respond to these.
3.	Be able to monitor waste management operations to identify potential	3.1. Use information to identify potential improvements.
	improvements.	3.2. Consult with others to identify where improvements could be made.
4.	Be able to evaluate the costs and benefits for improving waste	4.1. Use a range of information sources to analyse and identify the most suitable improvements.
	management operations.	4.2. Evaluate proposed improvements against organisation's objectives.
		4.3. Determine the potential impact of any proposed improvements on other aspects of site operations.
5.	Be able to produce project plans for implementing improvements to waste management operations	5.1. Prepare and submit a project plan for implementation based on the information gathered in accordance with organisational procedures.
6.	Be able to store, use and communicate information.	6.1. Communicate the recommendations for improvements to internal and external parties who might be affected by the changes and take into account their feedback.



	6.2. Provide clear and sufficient information to those responsible for implementing the project plan.	
	6.3. Maintain records in accordance with organisational procedures.	
7. Be able to resolve problems that could affect the implementation of	7.1. Resolve routine problems within the responsibility of the job role.	
improvements to waste management operations.	7.2. Refer problems and conditions outside the responsibility of the job role to correct personnel.	

Control maintenance and other engineering operations (OC\$08)

	According to Citation			Comments
Level: 4 Learning Outcome 1. Understand the legislative requirements and organisational procedures for controlling maintenance and other engineering operations.	Assessment Criteria 1.1. Describe the legislation, regulations and codes of practice applicable to maintenance and other engineering activities. 1.2. Describe the maintenance activities required for the following within own area of responsibility: • plant • systems • equipment • vehicles 1.3. Describe the organisational procedures for reporting faults and initiating repairs on site. 1.4. Describe the organisational procedures for implementation, control and completion of maintenance operations. 1.5. Describe the system for allocating contracts in own areas of responsibility.	Evidence Type	Portfolio Ref No	Comments
	 1.6. Describe the system for allocating permits to work in own areas of responsibility. 1.7. Describe the terms and conditions of 			
	 contracts in own area of responsibility, including any insurance policy conditions. 1.8. Describe the recording systems used for maintenance schedules, records, permits 			
	to work and other contract information.			



	1.9. Describe the factors that increase the likelihood of breakdowns and outline actions to prevent or reduce these. 1.10. Describe the safety and environmental protection procedures used for maintenance and other engineering activities. 1.11. Describe quality assurance systems used for maintenance and other engineering activities.	
	1.12. Explain why it is important to enforce procedures for quality, safety and environmental protection and outline actions to take in response to deviations from these. Instrumentation Instrumentatin Instrumentation	
2. Understand how to produce maintenance schedules.	for the required maintenance activities. 2.2. Describe the factors to consider when scheduling maintenance activities, including any insurance company	
	requirements. 2.3. Describe the difficulties that might occur when implementing maintenance activities and what should be included in contingency plans.	
3. Understand how to manage maintenance and other engineering operations.	personnel understand instructions and the methods used to do this. 3.2. Identify the technical skills needed for maintenance and engineering activities undertaken in own area of responsibility.	
	3.3. Describe the methods used to check that all personnel have the required skills and to identify training needs.	



	 3.4. Explain the importance of continuing professional development (CPD) for personnel. 3.5. Explain why statutory testing of equipment must be kept up-to-date, and how to check. 	
4. Be able to produce maintenance schedules.	 4.1. Check the maintenance activities that are required to achieve maintenance requirements. 4.2. Use data available to schedule the time 	
	and resources required to undertake maintenance activities in accordance with organisational procedures.	
	4.3. Manage maintenance schedules that comply with legislation, the requirements of external bodies and equipment manufacturer guidance.	
	4.4. Produce contingency plans which take potential difficulties into account.	
5. Be able to communicate maintenance information	5.1. Make maintenance schedules available to the people involved in implementing them and to others who would be affected by them.	
effectively.	5.2. Provide accurate instructions to those responsible for maintenance and other engineering activities and check they understand what is required.	
	5.3. Take steps to ensure those responsible for maintenance and other engineering activities will have the necessary resources available to perform work to the require standard.	
	5.4. Review regularly the frequency, nature and causes of breakdowns and use the information to resolve problems and prevent failures.	





	5.5. Maintain accurate and up-to-date records of maintenance and other engineering operations.	
6. Be able to mana maintenance an engineering personnel.	- · · · · ·	
	6.2. Ensure operatives on site implement and maintain systems to record faults and initiate repairs.	
7. Be able to monito maintenance an other engineering operations.	d and environmental impact of	
	7.2. Record completed maintenance tasks against the schedule in accordance with organisational procedures.	
	7.3. Ensure the implementation of maintenance and other engineering activities comply with organisational procedures.	
	7.4. Rectify any deviations from contractual or legal requirements.	
	7.5. Take measures to prevent potential breakdowns.	



Procedural Compliance (OCS09)

Level: 4		Evidence Type	Portfolio Ref	Comments
Learning Outcome	Assessment Criteria	Evidence Type	Νο	
1. Understand how to	1.1. Describe the legislative requirements,			
comply with	regulations, codes of practice and			
organisational procedures	guidance applicable to the processes			
and legislative	carried out at the site.			
requirements.	1.2. Describe the planning permission,			
	permit requirements and environmental			
	management system (EMS) for the site.			
	1.3. Describe the monitoring processes for			
	all machinery, plant and equipment			
	used on the site.			
	1.4. Describe the records required by			
	legislation and by company			
	procedures in relation to the site			
	activities.			
	1.5. Describe the organisational procedures			
	for dealing with waste, out of			
	specification waste and any other			
	rejects from the process.			
	1.6. Describe the methods used to			
	communicate different types of data			
	and information to comply with			
	legislative requirements and			
	organisational procedures.			
	1.7. Describe the storage and handling			
	procedures for the waste types			
	handled on the site.			
2. Be able to implement and	2.1. Establish regular monitoring and review			
maintain operating	schedules for all site operations to			
	maintain compliance with procedures.			



procedures required for	2.2. Complete monitoring and review	
legislative compliance.	processes to record data from:	
	 acceptable operating 	
	conditions	
	 abnormal operating conditions 	
	 reporting systems for variations 	
	2.3. Monitor all procedures designed to	
	meet compliance requirements and	
	review at intervals agreed with	
	organisational and regulatory	
	personnel.	
	2.4. Review health and safety procedures	
	regularly to comply with legislative	
	requirements.	
	2.5. Review environmental procedures	
	regularly to maintain compliance with	
	assessed environmental impact	
	requirements.	
	2.6. Recommend new or updated	
	procedures where data from	
	monitoring indicates they are needed.	
	2.7. Ensure that procedures cover all	
	operational situations on organisational	
	premises and for attendance at	
	external facilities.	
	2.8. Ensure review and monitoring processes	
	are in place and implemented for	
	situations where there is non-	
	compliance with permitted activities.	
3. Be able to use data and	3.1. Obtain information about new	
information to maintain	legislative requirements, approved	
organisational	codes of practice and other industry	
procedures.	best practices to maintain up to date	
	organisational procedures.	
	3.2. Maintain recording and information	
	systems in a way which enables them	



		to be used to extract information for review and monitoring purposes.
4.	Be able to resolve problems associated with	4.1. Take steps to deal with any failures with compliance.
	compliance issues.	4.2. Seek specialist advice to resolve situations which are outside own area of responsibility.
		4.3. Recommend steps to rectify any staff shortages, equipment deficiencies or external factors that prevent the maintenance of compliance regimes.

Manage and maintain systems for responding to emergencies (OCS10)

-	rel: 4		Evidence	Portfolio	Comments
1.	Understand the legislative requirements and organisational procedures for maintaining effective systems for	Assessment Criteria 1.1. Describe the types of emergency that may arise on site. 1.2. Describe the relevant health, safety and environmental legislation and organisational procedures for responding to an emergency.	Туре	Ref No	
	responding to emergencies.	2.1 Describe the planning and recourses			
2.	Understand how to maintain effective systems for responding to emergencies.	 2.1. Describe the planning and resource requirements for responding to the following emergencies in line with legislation and organisational procedures; fire accident spills breaches of security damage to property suspicious incidents power outages 2.2. Describe the types of recorded data used to review systems for responding to 			
		emergencies. 2.3. Describe deficiencies that may be identified during the review and methods			
		of resolving these deficiencies. 2.4. Identify the designated person that should be notified of accidents, incidents, interruptions to work, damage to property or any other situations.			



	 2.5. Explain why it is important for all personnel to receive training on how to respond to an emergency. 2.6. Explain why it is important to have effective systems for responding to emergencies. 	
3. Be able to implement emergency plans and procedures.	 3.1. Identify potential emergency situations for all activities within own area of responsibility. 3.2. Review emergency systems and 	
	procedures to provide responses to emergencies that may arise during site activities.	
	3.3. Implement emergency plans and procedures.	
	3.4. Manage preventative inspection and maintenance programmes for emergency equipment so that it is available at all times.	
	3.5. Carry out and record drills during normal work operations in accordance with legislative requirements and organisational procedures.	
	3.6. Manage mechanisms for communicating emergency plans and procedures to all personnel.	
	3.7. Train personnel to report incidents in accordance with legislative and organisational requirements.	
	3.8. Implement incident and accident reporting procedures for all activities in the work place.	
 Be able to maintain systems for responding to 	4.1. Review emergency procedures, equipment and resources required to maintain systems.	
emergencies.	4.2. Obtain feedback from personnel participating in emergency drills to identify potential improvements.	



4.3. Describe how to resolve any deficiencie identified through reviews, feedback and practices in accordance with legislative requirements and organisational procedures	
4.4. Evaluate incident and accident reports recommend improvements to organisational emergency procedures.	to
4.5. Notify designated person(s) of accident incidents, interruptions to work or any situation that require their attention.	
4.6. Maintain a record of training in acciden and emergency procedures for all staff employed.	t l

Manage an inspection visit at your site from regulatory bodies (OCS65)

Level: 4 Learning Outcome	Assessment Criteria	Evidence Type	Portfolio Ref No	Comments
1. Understand the regulatory environment.	 1.1 Describe the key areas of regulation for your organisation in relation to: staff equipment and machinery environment 			
	1.2 Describe the impact that changes in specific regulations have had on your organisation.			
	1.3 Explain how international regulations impact your organisation.			
	 1.4 Explain how compliance is enforced by the following regulatory bodies and the sanctions they can take for non- compliance: environmental regulator health and safety regulator planning regulator 			
2. Understand compliance within your organisation.	2.1 Explain how to develop a positive relationship between the organisation and the regulatory body.			
	2.2 Explain the benefits of developing a compliance culture within your organisation.			
	2.3 Detail the products and services supplied by your organisation and the compliance issues associated with them.			





2. The sheart are all be as a d	0.1 Evelois have to see a set for set in the	
3. Understand how to	3.1 Explain how to prepare for an inspection	
prepare for an inspection	visit, including:	
from a regulatory body.	 required resources from those 	
	available	
	 information required for the visit 	
	3.2 Explain how to minimise disruption to	
	business operations whilst satisfying the	
	requirements of the team.	
	3.3 Describe the regulatory body's approach	
	to monitoring visits.	
	3.4 Describe how to decide which staff will	
	be involved in the process.	
	3.5 Explain how support will be given to staff	
	involved in the process.	
	3.6 Explain the importance of staff being co-	
	operative during an inspection visit.	
4. Be able to plan for an	4.1 Plan arrangements for a potential	
inspection visit from a	inspection visit in terms of:	
regulatory body.	 issues to be considered 	
	inspection areas	
	 possible staff involvement 	
	documentation required	
	4.2 Review documentation identified.	
	4.3 Make sure senior management	
	understand the importance of preparing	
	for an inspection visit.	
	4.4 Brief staff who may be subject to an	
	interview during the inspection visit.	



SECTION 2 – Pathway 1- Pyrolysis and Gasification Hazardous Waste (AOC01a)



Manage the reception of hazardous waste (OCS11)

				Comments
Level: 4 Learning Outcome	Assessment Criteria	Evidence Type	Portfolio Ref No	
 Understand the regulations, procedures and requirements for managing waste operations. 	 1.1. Describe the legislative requirements, codes of practice and guidance applicable to the reception of hazardous waste on the site. 1.2. Describe the regulatory requirements and organisational procedures for dealing with unauthorised wastes. 1.3. Describe the organisational procedures for managing work activities on the site. 1.4. Describe the planning permission, permit requirements and environmental management system (EMS) for the site. 1.5. Describe the waste inspection, identification procedures and handling requirements for the types of hazardous waste received on site. 1.6. Describe the uses, purposes and processing requirements for documents relating to the reception and validation of hazardous waste received on the site. 			
	 1.7. Describe the records required by legislation and by organisational procedures relating to the reception, inspection and validation of hazardous wastes. 1.8. Describe the organisational procedures for the delivery of hazardous waste to the site. 			



2. Understand the health, safety and environmental impacts associated with the reception of hazardous waste.	2.1. Describe the organisational environmental policy and procedures applicable to the site.
	 health and safety environment
	2.3. Identify risks to the environment and human health resulting from the reception, inspection and validation of hazardous wastes.
	2.4. Describe risk analysis to minimise hazards to personnel and the environment for the whole workplace.
	2.5. State the types of personal protective equipment (PPE) required and how they must be used, maintained and stored.
3. Be able to implement systems and procedures to manage the reception of hazardous waste.	3.1. Implement systems and procedures for the reception and validation of hazardous wastes in accordance with legislative and organisational requirements.
	3.2. Implement systems and procedures that comply with legislative requirements to deal with hazardous wastes that need specific handling.
	3.3. Implement systems and procedures that comply with legislative requirements for the rejection of unauthorised hazardous wastes.
	3.4. Establish systems to control the movement of vehicles entering, moving around and leaving the site.



	3.5. Ensure personnel implement procedures and comply with legislative requirements for hazardous waste reception. 3.6. Ensure all procedures for the reception of hazardous wastes comply with legislative requirements to maintain the quality of the organisation's work. 3.7. Implement security arrangements to prevent the unauthorised delivery and removal of hazardous wastes on the
4. Be able to use and communicate information.	site. 4.1. Give instructions to customers and site personnel about the procedures for receiving and validating hazardous waste. 4.2. Maintain records and information systems relating to the reception, inspection and validation of hazardous wastes that meet legislative requirements. 4.3. Check the work programme and instructions are accurate and
	complete. 4.4. Communicate work instructions verbally and in writing. 4.5. Check that employees have understood work instructions. 4.6. Advise colleagues and managers about accidents, incidents, interruptions to work or any situations that require attention. 4.7. Maintain a record of training for all staff employed on transfer, recovery, transport and disposal operations on site.



		4.8. Notify customers and regulatory authorities of any breaches of the legislative requirements caused by the reception of unacceptable hazardous waste.	
5.	Be able to resolve problems which arise from managing the reception of hazardous waste.	5.1. Take steps to rectify any staff shortages, equipment deficiencies or external factors that prevent the reception of hazardous wastes.	
		5.2. Seek expert advice to resolve situations which are outside own area of responsibility.	
		5.3. Advise relevant people of any breaches of security or other situations which require their attention.	



Manage site operations at a gasification and pyrolysis waste thermal treatment facility (OCS54)

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_	el: 4		Evidence	Portfolio	Comments
	Irning Outcome	Assessment Criteria	Туре	Ref No	
	Understand the specific regulation and requirements for managing a	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to gasification and pyrolysis waste thermal treatment facilities.			
	gasification and pyrolysis waste thermal treatment	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	facilities	1.3. Describe the Control of Substances Hazardous to Health (COSHH) and risk assessment data used on the site.			
		1.4. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of waste from the site.			
		 1.5. Describe the records required by legislation in relation to: Gasification and pyrolysis waste thermal treatment operations Emissions to air and water Energy created, used and exported 			
		1.6. Describe the regulations and controls associated with export of energy from a site.			
	Understand the organisational	2.1. Describe the organisational procedures for managing work activities on site.			
	procedures for managing a	2.2. Describe the organisational procedures for managing personnel on site.			
	gasification and pyrolysis waste	2.3. Describe the operating procedures for all machinery, plant and equipment used on the site for handling and processing wastes.			



	thermal treatment	2.4. Describe the quality inspection, identification and
	facilities	handling procedures for the types of waste recovered
	lacimes	
		on site.
		2.5. Describe the organisational procedures for dealing with
		unauthorised wastes.
		2.6. Describe the onsite procedures for storing outputs and
		residues from gasification and pyrolysis waste thermal
		treatment operations.
		2.7. Describe the organisational procedures for dealing with
		residues, out of specification recovered wastes and
		any other rejects from the gasification and pyrolysis
		thermal treatment process.
		2.8. Describe the lifting and handling techniques suitable for
		recovered wastes and residues transported on site.
3.	Know how to	3.1. Identify hazards associated with gasification and
	identify risks and	pyrolysis waste thermal treatment facilities in relation to:
	manage work-	Health and safety
	related hazards	Environment
		3.2. Describe the control measures to reduce or eliminate
		risks to safety, health and the environment on the site.
		3.3. Describe the organisational procedures for dealing with
		spillages and emissions.
		3.4. State the types of personal protective equipment (PPE)
		required and how they must be used, maintained and
		stored.
		3.5. Describe the legal and organisational requirements for
		recording and reporting risks to health, safety and the
		environment.
4.	Be able to	4.1. Implement systems and procedures for thermal
	implement	treatment operations in accordance with legislative
	management	and organisational requirements.
	systems on a	4.2. Implement systems and procedures for the inspection
	gasification and	of wastes entering the gasification and pyrolysis waste
	pyrolysis waste	thermal treatment process.
	thermal treatment	4.3. Make arrangements for the supply of materials,
	facility	equipment and information needed to carry out



	gasification and pyrolysis waste thermal treatment
	operations.
	4.4. Implement systems and procedures for the safe transfer
	of outputs from gasification and pyrolysis waste thermal
	treatment operations.
	4.5. Make arrangements for the safe storage of outputs
	from gasification and pyrolysis waste thermal treatment
	operations.
	4.6. Ensure that all procedures for gasification and pyrolysis
	waste thermal treatment operations are adhered to.
5. Be able to manage	5.1. Implement work programmes that meet legislative and
a gasification and	organisational requirements for gasification and
pyrolysis waste	pyrolysis waste thermal treatment operations.
thermal treatment	5.2. Implement operating procedures that comply with
facility	health, safety and environmental protection
,	requirements.
	5.3. Ensure there are a sufficient number of trained
	personnel available on the work site.
	5.4. Monitor staff activity during gasification and pyrolysis
	waste thermal treatment operations to ensure the
	quality of the organisation's work is maintained.
	5.5. Check pyrolysis and gasification waste thermal
	treatment operations are effective.
	5.6. Ensure that the outputs from gasification and pyrolysis
	waste thermal treatment operations are stored
	correctly in accordance with legislative and
	organisational procedures.
	5.7. Record the output used, created and exported from
	the site.
	5.8. Record data on emissions to air and water in
	accordance with legislative requirements.
6. Be able to manage	6.1. Maintain records of wastes processed and the control
information on a	
	parameters for gasification and pyrolysis waste thermal
gasification and	treatment operations in accordance with legislative
pyrolysis waste	and organisational requirements.



thermal treatment facility	6.2. Report compliance monitoring data in accordance with legislative and organisational requirements.		
7. Be able to resolve problems which arise from the	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect gasification and pyrolysis waste thermal treatment operations.		
management of gasification and pyrolysis waste thermal treatment	7.2. Make arrangements for reprocessing or disposing of any materials that fail to meet the quality standards required for gasification and pyrolysis waste thermal treatment operations.		
facilities	7.3. Make arrangements for alternative energy supply when energy created on site is inadequate.		
	7.4. Implement procedures for dealing with spillages on site.		
	7.5. Seek specialist advice to resolve situations which are outside the responsibility of the job role.		



Manage transfer and disposal from hazardous waste thermal treatment and recovery operations (OC\$56)

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Level: 4		Evidence	Portfolio	Comments
Learning Outcome	Assessment Criteria	Туре	Ref No	
1. Understand the legislative requirements for	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of hazardous waste from the site.			
transfer and disposal from hazardous waste	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
thermal treatment operations.	(COSHH) and risk assessment data used on the site.			
	 1.4. Describe the records required by legislation in relation to: the transfer of recovered hazardous wastes the transport of recovered hazardous wastes the disposal of recovered hazardous wastes emissions to air and water 			
	1.5. Describe the legislative requirements for the export of energy from the site.			
2. Understand the organisational	2.1. Describe the organisational procedures for managing work activities.			
procedures for transfer and	2.2. Describe the organisational procedures for managing personnel.			
disposal from hazardous waste thermal treatment	2.3. Describe the quality inspection, identification and handling requirements for the types of hazardous waste recovered at the site.			
operations.	2.4. Describe the operating procedures for all machinery, plant and equipment used on the site for loading recovered wastes and residues.			
	2.5. Describe the on-site procedures for storing the outputs and residues from hazardous waste thermal treatment operations.			



		2.6. Describe the organisational procedures for the loading,
		transfer and transport of hazardous waste from the site.
		2.7. Describe the organisational procedures for dealing with
		residues, out of specification recovered hazardous waste
		and any other rejects from the process.
		2.8. Describe the lifting and handling techniques that are
		suitable for the outputs and residues that are being
		transported from the site.
3.	Know how to	3.1. Identify hazards associated with the loading, transfer and
	identify risks and	transport of hazardous waste from the site in relation to:
	, manage work-	health and safety
	related hazards.	environment
		3.2. Describe the control measures to reduce or eliminate risks
		to safety, health and the environment on the site.
		3.3. Describe the organisational procedures for dealing with
		spillages and emissions.
		3.4. State the types of personal protective equipment (PPE)
		required and how they must be used, maintained and
		stored.
		3.5. Describe the legal and organisational requirements for
		recording and reporting risks to health, safety and the
		environment.
4	Be able to	
4.		4.1. Implement systems and procedures for the transfer and
	implement	transport of outputs from the hazardous waste thermal
	management	treatment operation.
	systems for	4.2. Implement systems and procedures for the disposal of
	transfer and	residues from the hazardous waste thermal treatment
	disposal from	operation.
	hazardous waste	4.3. Implement systems and procedures for the safe transfer of
	thermal treatment	outputs from the hazardous waste thermal treatment
	operations.	operation.
		4.4. Implement systems and procedures to record energy
		created, used and exported from the site.
		4.5. Make arrangements for the supply of resources needed
		to carry out the loading, transport or energy transfer
		operations from the site.
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	 4.6. Make arrangements for the safe loading of the outputs and residues from the hazardous waste thermal treatment operation. 4.7. Apply management systems to ensure that all procedures for waste transfer and disposal processes are adhered to. 	
5. Be able to manage information for transfer and disposal from hazardous waste	 5.1. Ensure that transport documentation for all materials leaving the site is completed in order to comply with legislative requirements and organisational procedures. 5.2. Maintain records of all outputs and residues leaving the site in accordance with legislative requirements and organisational procedures. 	
thermal treatment operations.	5.3. Report any failure to meet legislative requirements for emissions to air and water to the designated person.	
6. Be able to resolve problems which arise during the transfer and disposal from hazardous waste thermal treatment	 6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: loading transfer disposal 	
operations.	6.2. Implement and communicate procedures for dealing with spillages on site for all waste and materials.	
	6.3. Make arrangements for alternative energy supply when energy created on the site is inadequate for process needs.	
	6.4. Seek specialist advice to resolve situations which are outside the responsibility of the job role.	



SECTION 2 – Pathway2 - Autoclaving Hazardous Waste (AOC01b)



Manage the reception of hazardous waste (OCS11)

Level: 4 Learning Outcome	Assessment Criteria	Evidence Type	Portfolio Ref No	Comments
 Understand the regulations, procedures and requirements for managing waste operations. 	 1.1. Describe the legislative requirements, codes of practice and guidance applicable to the reception of hazardous waste on the site. 1.2. Describe the regulatory requirements and organisational procedures for dealing with unauthorised wastes. 1.3. Describe the organisational procedures for managing work activities on the site. 1.4. Describe the planning permission, permit requirements and environmental management system (EMS) for the site. 1.5. Describe the waste inspection, identification procedures and handling requirements for the types of hazardous waste received on site. 1.6. Describe the uses, purposes and processing requirements for documents relating to the reception and validation of hazardous waste received on the site. 			
	 1.7. Describe the records required by legislation and by organisational procedures relating to the reception, inspection and validation of hazardous wastes. 1.8. Describe the organisational procedures for the delivery of hazardous waste to the site. 			



2. Understand the health,	0.1 Describe the ergenisetian of	
	2.1. Describe the organisational	
safety and environmental	environmental policy and procedures	
impacts associated with	applicable to the site.	
the reception of	2.2. Identify hazards associated with the	
hazardous waste.	reception of hazardous waste on site in	
	relation to:	
	 health and safety 	
	 environment 	
	2.3. Identify risks to the environment and	
	human health resulting from the	
	reception, inspection and validation of	
	hazardous wastes.	
	2.4. Describe risk analysis to minimise	
	hazards to personnel and the	
	environment for the whole workplace.	
	2.5. State the types of personal protective	
	equipment (PPE) required and how	
	they must be used, maintained and	
	stored.	
2 De state te incuste se est		
3. Be able to implement	3.1. Implement systems and procedures for	
systems and procedures	the reception and validation of	
to manage the reception	hazardous wastes in accordance with	
of hazardous waste.	legislative and organisational	
	requirements.	
	3.2. Implement systems and procedures	
	that comply with legislative	
	requirements to deal with hazardous	
	wastes that need specific handling.	
	3.3. Implement systems and procedures	
	that comply with legislative	
	requirements for the rejection of	
	unauthorised hazardous wastes.	
	3.4. Establish systems to control the	
	movement of vehicles entering, moving	
	around and leaving the site.	



	 3.5. Ensure personnel implement procedures and comply with legislative requirements for hazardous waste reception. 3.6. Ensure all procedures for the reception of hazardous wastes comply with legislative requirements to maintain the quality of the organisation's work. 3.7. Implement security arrangements to prevent the unauthorised delivery and 	
	removal of hazardous wastes on the site.	
4. Be able to use and communicate information.	4.1. Give instructions to customers and site personnel about the procedures for receiving and validating hazardous waste.	
	4.2. Maintain records and information systems relating to the reception, inspection and validation of hazardous wastes that meet legislative requirements.	
	4.3. Check the work programme and instructions are accurate and complete.	
	4.4. Communicate work instructions verbally and in writing.	
	4.5. Check that employees have understood work instructions.	
	 4.6. Advise colleagues and managers about accidents, incidents, interruptions to work or any situations that require attention. 	
	4.7. Maintain a record of training for all staff employed on transfer, recovery, transport and disposal operations on site.	



		4.8. Notify customers and regulatory authorities of any breaches of the legislative requirements caused by the reception of unacceptable hazardous waste.	
5.	Be able to resolve problems which arise from managing the reception of hazardous waste.	5.1. Take steps to rectify any staff shortages, equipment deficiencies or external factors that prevent the reception of hazardous wastes.	
		 5.2. Seek expert advice to resolve situations which are outside own area of responsibility. 5.3. Advise relevant people of any 	
		breaches of security or other situations which require their attention.	



Manage site operations at autoclaving waste thermal treatment facility (OC\$55)

Level: 4		Evidence	Portfolio	Comments
Learning Outcome	Assessment Criteria	Туре	Ref No	
1. Understand the	1.1. Describe the legislative requirements, regulations,			
specific regulation	codes of practice and guidance applicable to			
and requirements	autoclaving waste thermal treatment facilities.			
for managing an	1.2. Describe the planning permission, permit requirements			
autoclaving waste	and environmental management system (EMS) for the			
thermal treatment	site.			
facilities	1.3. Describe the Control of Substances Hazardous to			
	Health (COSHH) and risk assessment data used on the			
	site.			
	1.4. Describe the legislative requirements, regulations,			
	codes of practice and guidance applicable to the			
	transfer and transport of waste from the site.			
	1.5. Describe the records required by legislation in relation			
	to:			
	 Autoclaving waste thermal treatment operations 			
	Emissions to air and water			
	Energy created, used and exported			
	1.6. Describe the regulations and controls associated with			
	export of energy from a site.			
2. Understand the	2.1. Describe the organisational procedures for managing			
organisational	work activities on site.			
procedures for	2.2. Describe the organisational procedures for managing			
managing	personnel on site.			
autoclaving waste	2.3. Describe the operating procedures for all machinery,			
thermal treatment	plant and equipment used on the site for handling and			
facilities	processing wastes.			
	2.4. Describe the quality inspection, identification and			
	handling procedures for the types of waste recovered			
	on site.			



	2.5. Describe the organisational procedures for dealing with unauthorised wastes.
	2.6. Describe the onsite procedures for storing outputs and
	residues from autoclaving waste thermal treatment
	operations.
	2.7. Describe the organisational procedures for dealing with
	residues, out of specification recovered wastes and
	any other rejects from the autoclaving thermal
	treatment process.
	2.8. Describe the lifting and handling techniques suitable for
	recovered wastes and residues transported on site.
3. Know how to	3.1. Identify hazards associated with to autoclaving waste
identify risks and	thermal treatment facilities in relation to:
manage work-	Health and safety
related hazards	Environment
	3.2. Describe the control measures to reduce or eliminate
	risks to safety, health and the environment on the site.
	3.3. Describe the organisational procedures for dealing with
	spillages and emissions.
	3.4. State the types of personal protective equipment (PPE)
	required and how they must be used, maintained and
	stored.
	3.5. Describe the legal and organisational requirements for
	recording and reporting risks to health, safety and the
	environment.
4. Be able to	4.1. Implement systems and procedures for thermal
implement	treatment operations in accordance with legislative
management	and organisational requirements.
systems on an	4.2. Implement systems and procedures for the inspection
autoclaving waste	of wastes entering the autoclaving waste thermal
thermal treatment	treatment process.
facility	4.3. Make arrangements for the supply of materials,
	equipment and information needed to carry out
	autoclaving waste thermal treatment operations.





	4.4. Implement systems and procedures for the safe transfer of outputs from autoclaving waste thermal treatment operations.
5. Be able to manage an autoclaving waste thermal treatment facility	5.1. Implement work programmes that meet legislative and organisational requirements for autoclaving waste thermal treatment operations.
	5.3. Ensure there are a sufficient number of trained personnel available on the work site.
	operations are effective. 5.6. Ensure that the outputs from autoclaving waste thermal treatment operations are stored correctly in accordance with legislative and organisational procedures. 6.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
4 Po ablo to manazzo	5.7. Record the output used created and exported from the site. 5.8. Record data on emissions to air and water in accordance with legislative requirements. 6.1. Maintain records of wastes processed and the control
6. Be able to manage information on an autoclaving waste thermal treatment facility	 6.1. Maintain records of wastes processed and the control parameters for autoclaving waste thermal treatment operations in accordance with legislative and organisational requirements. 6.2. Report compliance monitoring data in accordance with legislative and organisational requirements.



7.	Be able to resolve problems which arise from the	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect autoclaving waste thermal treatment operations.	
	management of autoclaving waste thermal treatment facilities	7.2. Make arrangements for reprocessing or disposing of any materials that fail to meet the quality standards required for autoclaving waste thermal treatment operations.	
		7.3. Make arrangements for alternative energy supply when energy created on site is inadequate.	
		7.4. Implement procedures for dealing with spillages on site.	
		7.5. Seek specialist advice to resolve situations which are outside the responsibility of the job role.	



Manage transfer and disposal from hazardous waste thermal treatment and recovery operations (OC\$56)

Level: 4 Evic			Portfolio	Comments
Learning Outcome	Assessment Criteria	Туре	Ref No	
1. Understand the legislative requirements for	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of hazardous waste from the site.			
transfer and disposal from hazardous waste	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
thermal treatment operations.	(COSHH) and risk assessment data used on the site.			
	 1.4. Describe the records required by legislation in relation to: the transfer of recovered hazardous wastes the transport of recovered hazardous wastes the disposal of recovered hazardous wastes emissions to air and water 			
	1.5. Describe the legislative requirements for the export of energy from the site.			
2. Understand the organisational	2.1. Describe the organisational procedures for managing work activities.			
procedures for transfer and	2.2. Describe the organisational procedures for managing personnel.			
disposal from hazardous waste thermal treatment	2.3. Describe the quality inspection, identification and handling requirements for the types of hazardous waste recovered at the site.			
operations.	2.4. Describe the operating procedures for all machinery, plant and equipment used on the site for loading recovered wastes and residues.			
	2.5. Describe the on-site procedures for storing the outputs and residues from hazardous waste thermal treatment operations.			



		2.6. Describe the organisational procedures for the loading,
		transfer and transport of hazardous waste from the site.
		2.7. Describe the organisational procedures for dealing with
		residues, out of specification recovered hazardous waste
		and any other rejects from the process.
		2.8. Describe the lifting and handling techniques that are
		suitable for the outputs and residues that are being
		transported from the site.
3.	Know how to	3.1. Identify hazards associated with the loading, transfer and
	identify risks and	transport of hazardous waste from the site in relation to:
	manage work-	 health and safety
	related hazards.	environment
		3.2. Describe the control measures to reduce or eliminate risks
		to safety, health and the environment on the site.
		3.3. Describe the organisational procedures for dealing with
		spillages and emissions.
		3.4. State the types of personal protective equipment (PPE)
		required and how they must be used, maintained and
		stored.
		3.5. Describe the legal and organisational requirements for
		recording and reporting risks to health, safety and the
		environment.
4	Be able to	4.1. Implement systems and procedures for the transfer and
	implement	transport of outputs from the hazardous waste thermal
	management	treatment operation.
	systems for	4.2. Implement systems and procedures for the disposal of
	transfer and	residues from the hazardous waste thermal treatment
	disposal from	operation.
	hazardous waste	4.3. Implement systems and procedures for the safe transfer of
	thermal treatment	outputs from the hazardous waste thermal treatment
	operations.	operation.
		4.4. Implement systems and procedures to record energy
		created, used and exported from the site.
		4.5. Make arrangements for the supply of resources needed
1		to carry out the loading, transport or energy transfer
		operations from the site.



	 4.6. Make arrangements for the safe loading of the outputs and residues from the hazardous waste thermal treatment operation. 4.7. Apply management systems to ensure that all procedures for waste transfer and disposal processes are adhered to.
5. Be able to manage informatior transfer an disposal fro hazardous	d 5.2. Maintain records of all outputs and residues leaving the site in accordance with legislative requirements and
thermal tre operations	\mathbf{v}
6. Be able to problems v arise during transfer an disposal fro hazardous thermal tre	waste transport atment disposal
operations	6.2. Implement and communicate procedures for dealing with spillages on site for all waste and materials.
	6.3. Make arrangements for alternative energy supply when energy created on the site is inadequate for process needs.
	6.4. Seek specialist advice to resolve situations which are outside the responsibility of the job role.



SECTION 3 – Pathway 3 – Pyrolysis and Gasification Non-Hazardous Waste (AOC01c)



Manage the reception of non-hazardous waste (OC\$12)

Level: 3		Evidence Type	Portfolio Ref	Comments
Learning Outcome	Assessment Criteria	Endence Type	No	
 Understand the 	1.1. Describe the legislative requirements,			
regulations, procedures	codes of practice and guidance			
and requirements for	applicable to the reception of non-			
managing waste	hazardous waste on the site.			
operations.	1.2. Describe the regulatory requirements			
	and organisational procedures for			
	dealing with unauthorised wastes.			
	1.3. Describe the organisational			
	procedures for managing work			
	activities on the site.			
	1.4. Describe the planning permission,			
	permit requirements and			
	environmental management system			
	(EMS) for the site.			
	1.5. Describe the waste inspection,			
	identification procedures and			
	handling requirements for the types of			
	non-hazardous waste received on			
	site.			
	1.6. Describe the uses, purposes and			
	processing requirements for			
	documents relating to the reception			
	and validation of non-hazardous			
	waste received on the site.			
	1.7. Describe the records required by			
	legislation and by organisational			
	procedures relating to the reception,			
	inspection and validation of non-			
	hazardous wastes.			



		1.8. Describe the organisational procedures for the delivery of non-hazardous waste to the site.	
2.	Understand the health, safety and environmental impacts associated with	2.1. Describe the organisational environmental policy and procedures applicable to the site.	
	the reception of non- hazardous waste.	 2.2. Identify hazards associated with the reception of non-hazardous waste on site in relation to: health and safety 	
		 environment 	
		2.3. Describe risk analysis to minimise	
		hazards to personnel and the	
		environment for the whole workplace.	
		2.4. Identify risks to the environment and	
		human health resulting from the	
		reception, inspection and validation of non-hazardous wastes.	
		2.5. State the types of personal protective	
		equipment (PPE) required and how	
		they must be used, maintained and	
		stored.	
3.	Be able to implement	3.1. Implement systems and procedures for	
	systems and procedures	the reception and validation of non-	
	to manage the reception	hazardous wastes in accordance with	
	of non-hazardous waste.	legislative and organisational	
		requirements.3.2. Implement systems and procedures	
		that comply with legislative	
		requirements to deal with non-	
		hazardous wastes that need specific	
		handling.	
		3.3. Implement systems and procedures	
		that comply with legislative	
1		requirements for the rejection of	
		unauthorised non-hazardous wastes.	



	 3.4. Establish systems to control the movement of vehicles entering, moving around and leaving the site. 3.5. Ensure personnel implement procedures and comply with legislative requirements for non-hazardous waste reception. 3.6. Ensure all procedures for the reception of non-hazardous wastes comply with legislative requirements to maintain the quality of the organisation's work. 3.7. Implement security arrangements to 	
	and removal of non-hazardous wastes on the site.	
4. Be able to use and communicate information.	4.1. Give instructions to customers and site personnel about the procedures for receiving and validating non- hazardous waste.	
	4.2. Maintain records and information systems relating to the reception, inspection and validation of non- hazardous wastes that meet legislative requirements.	
	4.3. Check the work programme and instructions are accurate and complete.	
	4.4. Communicate work instructions verbally and in writing.4.5. Check that employees have	
	understood work instructions.4.6. Advise colleagues and managers about accidents, incidents, interruptions to work or any situations that require attention.	



	4.7. Maintain a record of training for all staff employed on transfer, recovery, transport and disposal operations on site.	
	4.8. Notify customers and regulatory authorities of any breaches of the legislative requirements caused by the reception of unacceptable non- hazardous waste.	
5. Be able to resolve problems which arise from managing the reception of non-hazardous waste.	5.1. Take steps to rectify any staff shortages, equipment deficiencies or external factors that prevent the reception of non-hazardous wastes.	
	5.2. Seek expert advice to resolve situations which are outside own area of responsibility.	
	5.3. Advise relevant people of any breaches of security or other situations which require their attention.	



Manage site operations at a gasification and pyrolysis waste thermal treatment facility (OCS54)

Le	Level: 4 Ev			Portfolio	Comments
Le	arning Outcome	Assessment Criteria	Туре	Ref No	
1.	Understand the specific regulation and requirements for managing a	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to gasification and pyrolysis waste thermal treatment facilities.			
	gasification and pyrolysis waste thermal treatment	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	facilities	1.3. Describe the Control of Substances Hazardous to Health (COSHH) and risk assessment data used on the site.			
		1.4. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of waste from the site.			
		 1.5. Describe the records required by legislation in relation to: Gasification and pyrolysis waste thermal treatment operations Emissions to air and water 			
		Energy created, used and exported 1.6. Describe the regulations and controls associated with export of energy from a site.			
2.	Understand the organisational	2.1. Describe the organisational procedures for managing work activities on site.			
	procedures for managing a	2.2. Describe the organisational procedures for managing personnel on site.			
	gasification and pyrolysis waste	2.3. Describe the operating procedures for all machinery, plant and equipment used on the site for handling and processing wastes.			



thermal treatment facilities	2.4. Describe the quality inspection, identification and handling procedures for the types of waste recovered on site.
	unauthorised wastes.
	2.6. Describe the onsite procedures for storing outputs and residues from gasification and pyrolysis waste thermal treatment operations.
	2.7. Describe the organisational procedures for dealing with residues, out of specification recovered wastes and any other rejects from the gasification and pyrolysis thermal treatment process.
	2.8. Describe the lifting and handling techniques suitable for recovered wastes and residues transported on site.
 Know how to identify risks and manage work- related hazards 	 3.1. Identify hazards associated with gasification and pyrolysis waste thermal treatment facilities in relation to: Health and safety Environment
	3.2. Describe the control measures to reduce or eliminate risks to safety, health and the environment on the site.
	3.3. Describe the organisational procedures for dealing with spillages and emissions.
	3.4. State the types of personal protective equipment (PPE) required and how they must be used, maintained and stored.
	3.5. Describe the legal and organisational requirements for recording and reporting risks to health, safety and the environment.
4. Be able to implement management	4.1. Implement systems and procedures for thermal treatment operations in accordance with legislative and organisational requirements.
systems on a gasification and pyrolysis waste	4.2. Implement systems and procedures for the inspection of wastes entering the gasification and pyrolysis waste thermal treatment process.
thermal treatment facility	4.3. Make arrangements for the supply of materials, equipment and information needed to carry out



	gasification and pyrolysis waste thermal treatment	
	operations.	
	4.4. Implement systems and procedures for the safe transfer	
	of outputs from gasification and pyrolysis waste thermal	
	treatment operations.	
	4.5. Make arrangements for the safe storage of outputs	
	from gasification and pyrolysis waste thermal treatment	
	operations.	
	4.6. Ensure that all procedures for gasification and pyrolysis	
	waste thermal treatment operations are adhered to.	
5. Be able to manage	5.1. Implement work programmes that meet legislative	
a gasification and	and organisational requirements for gasification and	
pyrolysis waste	pyrolysis waste thermal treatment operations.	
thermal treatment	5.2. Implement operating procedures that comply with	
facility	health, safety and environmental protection	
raciiry	requirements.	
	5.3. Ensure there are a sufficient number of trained	
	personnel available on the work site.	
	5.4. Monitor staff activity during gasification and pyrolysis	
	waste thermal treatment operations to ensure the	
	quality of the organisation's work is maintained.	
	5.5. Check pyrolysis and gasification waste thermal	
	treatment operations are effective.	
	5.6. Ensure that the outputs from gasification and pyrolysis	
	waste thermal treatment operations are stored	
	correctly in accordance with legislative and	
	organisational procedures.	
	5.7. Record the output used, created and exported from	
	the site.	
	5.8. Record data on emissions to air and water in	
	accordance with legislative requirements.	
6. Be able to manage	6.1. Maintain records of wastes processed and the control	
information on a	parameters for gasification and pyrolysis waste thermal	
gasification and	treatment operations in accordance with legislative	
pyrolysis waste	and organisational requirements.	



thermal treatment facility	6.2. Report compliance monitoring data in accordance with legislative and organisational requirements.		
7. Be able to resolve problems which arise from the	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect gasification and pyrolysis waste thermal treatment operations.		
management of gasification and pyrolysis waste thermal treatment	7.2. Make arrangements for reprocessing or disposing of any materials that fail to meet the quality standards required for gasification and pyrolysis waste thermal treatment operations.		
facilities	7.3. Make arrangements for alternative energy supply when energy created on site is inadequate.		
	7.4. Implement procedures for dealing with spillages on site.7.5. Seek specialist advice to resolve situations which are		
	outside the responsibility of the job role.		



Manage transfer and disposal from non-hazardous waste thermal treatment operations (OCS58)

Level: 4		Evidence	Portfolio	Comments
Learning Outcome	Assessment Criteria	Туре	Ref No	
1. Understand the	1.1. Describe the legislative requirements, regulations,			
legislative	codes of practice and guidance applicable to the			
requirements for	transfer and transport of non-hazardous waste from the			
transfer and disposal	site.			
from non-hazardous	1.2. Describe the planning permission, permit requirements			
waste thermal	and environmental management system (EMS) for the			
treatment	site.			
operations	1.3. Describe the Control of Substances Hazardous to			
	Health (COSHH) and risk assessment data used on the			
	site.			
	1.4. Describe the records required by legislation in relation			
	to:			
	The transfer of recovered non-hazardous wastes			
	The transport of recovered non-hazardous wastes			
	The disposal of recovered non-hazardous wastes			
	Emissions to air and water			
	1.5. Describe the legislative requirements for the export of			
	energy from the site.			
2. Understand the	2.1. Describe the organisational procedures for managing			
organisational	work activities.			
procedures for	2.2. Describe the organisational procedures for managing			
transfer and disposal	personnel.			
from non-hazardous	2.3. Describe the quality inspection, identification and			
waste thermal	handling requirements for the types of non-hazardous			
treatment	waste recovered at the site.			
operations	2.4. Describe the operating procedures for all machinery,			
	plant and equipment used on the site for loading			
	recovered wastes and residues.			





		2.5. Describe the on-site procedures for storing the outputs
		and residues from non-hazardous waste thermal
		treatment operations.
		2.6. Describe the organisational procedures for the loading,
		transfer and transport of non-hazardous waste from the
		site.
		2.7. Describe the organisational procedures for dealing with
		residues, out of specification recovered non-hazardous
		waste and any other rejects from the process.
		2.8. Describe the lifting and handling techniques that are
		suitable for the outputs and residues that are being
		transported from the site.
3.	Know how to identify	3.1. Identify hazards associated with the loading, transfer
0.	risks and manage	and transport of non-hazardous waste from the site in
	work-related hazards	relation to:
		Health and safety
		Environment
		3.2. Describe the control measures to reduce or eliminate
		risks to safety, health and the environment on the site.
		3.3. Describe the organisational procedures for dealing with
		spillages and emissions.
		3.4. State the types of personal protective equipment (PPE)
		required and how they must be used, maintained and
		stored.
		3.5. Describe the legal and organisational requirements for
		recording and reporting risks to health, safety and the
	D	environment.
4.	Be able to	4.1. Implement systems and procedures for the transfer and
	implement	transport of outputs from the non-hazardous waste
	management	thermal treatment operation.
	systems for transfer	4.2. Implement systems and procedures for the disposal of
1	and disposal from	residues from the non-hazardous waste thermal
1	non-hazardous	treatment operation.
1	waste thermal	4.3. Implement systems and procedures for the safe transfer
	treatment	of outputs from the non-hazardous waste thermal
	operations	treatment operation.



	4.4. Implement systems and procedures to record energy created, used and exported from the site.
	4.5. Make arrangements for the supply of resources needed to carry out the loading, transport or energy transfer operations from the site.
	4.6. Make arrangements for the safe loading of the outputs and residues from the non-hazardous waste thermal treatment operation.
	4.7. Apply management systems to ensure that all procedures for waste transfer and disposal processes are adhered to.
5. Be able to manage information for the transfer and disposal	5.1. Ensure that transport documentation for all materials leaving the site is completed in order to comply with legislative requirements and organisational procedures.
from non-hazardous waste thermal treatment	5.2. Maintain records of all outputs and residues leaving the site in accordance with legislative requirements and organisational procedures.
operations	5.3. Report any failure to meet legislative requirements for emissions to air and water to the designated person.
6. Be able to resolve problems which arise during the transfer and disposal from non-hazardous waste thermal treatment	 6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: Loading Transfer Transport Disposal
operations	6.2. Implement and communicate procedures for dealing with spillages on site for all waste and materials.
	6.3. Make arrangements for alternative energy supply when energy created on the site is inadequate for process needs.
	6.4. Seek specialist advice to resolve situations which are outside the responsibility of the job role.



SECTION 4 – Pathway 3 – Autoclaving Non-Hazardous Waste (AOC01d)



Manage the reception of non-hazardous waste (OC\$12)

Level: 3	Evidence Type		Portfolio Ref	Comments
Learning Outcome	Assessment Criteria	2.2	No	
1. Understand the	1.1. Describe the legislative requirements,			
regulations, procedures	codes of practice and guidance			
and requirements for	applicable to the reception of non-			
managing waste	hazardous waste on the site.			
operations.	1.2. Describe the regulatory requirements			
	and organisational procedures for			
	dealing with unauthorised wastes.			
	1.3. Describe the organisational procedures			
	for managing work activities on the site.			
	1.4. Describe the planning permission,			
	permit requirements and environmental			
	management system (EMS) for the site.			
	1.5. Describe the waste inspection,			
	identification procedures and handling			
	requirements for the types of non-			
	hazardous waste received on site.			
	1.6. Describe the uses, purposes and			
	processing requirements for documents			
	relating to the reception and validation			
	of non-hazardous waste received on			
	the site.			
	1.7. Describe the records required by			
	legislation and by organisational			
	procedures relating to the reception,			
	inspection and validation of non-			
	hazardous wastes.			
	1.8. Describe the organisational procedures			
	for the delivery of non-hazardous waste			
	to the site.			





2.	Understand the health,	2.1. Describe the organisational		
Ζ.	safety and environmental	environmental policy and procedures		
	impacts associated with	applicable to the site.		
	the reception of non-	2.2. Identify hazards associated with the		
	hazardous waste.	reception of non-hazardous waste on		
		site in relation to:		
		 health and safety 		
		environment		
		2.3. Describe risk analysis to minimise		
		hazards to personnel and the		
		environment for the whole workplace.		
		2.4. Identify risks to the environment and		
		human health resulting from the		
		reception, inspection and validation of		
		non-hazardous wastes.		
		2.5. State the types of personal protective		
		equipment (PPE) required and how		
		they must be used, maintained and		
		stored.		
3.	Be able to implement	3.1. Implement systems and procedures for		
0.	systems and procedures	the reception and validation of non-		
	to manage the reception	hazardous wastes in accordance with		
	of non-hazardous waste.	legislative and organisational		
	or non-nazardous waste.			
		requirements.		
		3.2. Implement systems and procedures that		
		comply with legislative requirements to		
		deal with non-hazardous wastes that		
		need specific handling.		
		3.3. Implement systems and procedures		
		that comply with legislative		
		requirements for the rejection of		
		unauthorised non-hazardous wastes.		
		3.4. Establish systems to control the		
		movement of vehicles entering,		
		moving around and leaving the site.		
L		ů ř	1	



	3.5. Ensure personnel implement procedures and comply with legislative requirements for non-hazardous waste reception.
	prevent the unauthorised delivery and removal of non-hazardous wastes on the site.
4. Be able to use and communicate information.	4.1. Give instructions to customers and site personnel about the procedures for receiving and validating non- hazardous waste.
	4.2. Maintain records and information systems relating to the reception, inspection and validation of non- hazardous wastes that meet legislative requirements.
	4.3. Check the work programme and instructions are accurate and complete.
	4.4. Communicate work instructions verbally and in writing. 4.5. Check that employees have
	 4.6. Advise colleagues and managers about accidents, incidents, interruptions to work or any situations that require attention.
	4.7. Maintain a record of training for all staff employed on transfer, recovery, transport and disposal operations on site.



		4.8. Notify customers and regulatory authorities of any breaches of the legislative requirements caused by the reception of unacceptable non- hazardous waste.	
5.	Be able to resolve problems which arise from managing the reception of non-hazardous waste.	5.1 Take steps to rectify any staff shortages, equipment deficiencies or external factors that prevent the reception of non-hazardous wastes.	
		5.3. Seek expert advice to resolve situations which are outside own area of responsibility.	
		5.3. Advise relevant people of any breaches of security or other situations which require their attention.	



Manage site operations at autoclaving waste thermal treatment facility (OC\$55)

Level: 4		Evidence	Portfolio	Comments	
Learning Outcome	Assessment Criteria	Туре	Ref No		
1. Understand the	1.1. Describe the legislative requirements, regulations,				
specific regulation	codes of practice and guidance applicable to				
and requirements	autoclaving waste thermal treatment facilities.	-			
for managing an	1.2. Describe the planning permission, permit requirements				
autoclaving waste thermal treatment	and environmental management system (EMS) for the				
facilities	site. 1.3. Describe the Control of Substances Hazardous to				
lacinites					
	Health (COSHH) and risk assessment data used on the site.				
	1.4. Describe the legislative requirements, regulations,				
	codes of practice and guidance applicable to the				
	transfer and transport of waste from the site.				
	1.5. Describe the records required by legislation in relation				
	to:				
	Autoclaving waste thermal treatment operations				
	Emissions to air and water				
	Energy created, used and exported				
	1.6. Describe the regulations and controls associated with				
	export of energy from a site.				
2. Understand the	2.1. Describe the organisational procedures for managing				
organisational	work activities on site.				
procedures for	2.2. Describe the organisational procedures for managing				
managing	personnel on site.				
autoclaving waste	2.3. Describe the operating procedures for all machinery,				
thermal treatment	plant and equipment used on the site for handling and				
facilities	processing wastes.				
	2.4. Describe the quality inspection, identification and				
	handling procedures for the types of waste recovered				
	on site.				



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		2.5. Describe the organisational procedures for dealing with unauthorised wastes.
		2.6. Describe the onsite procedures for storing outputs and
		residues from autoclaving waste thermal treatment
		operations.
		2.7. Describe the organisational procedures for dealing with
		residues, out of specification recovered wastes and
		any other rejects from the autoclaving thermal
		treatment process.
		2.8. Describe the lifting and handling techniques suitable for
		recovered wastes and residues transported on site.
3. Kr	now how to	3.1. Identify hazards associated with to autoclaving waste
ide	lentify risks and	thermal treatment facilities in relation to:
	ianage work-	Health and safety
	elated hazards	Environment
		3.2. Describe the control measures to reduce or eliminate
		risks to safety, health and the environment on the site.
		3.3. Describe the organisational procedures for dealing with
		spillages and emissions.
		3.4. State the types of personal protective equipment (PPE)
		required and how they must be used, maintained and
		stored.
		3.5. Describe the legal and organisational requirements for
		recording and reporting risks to health, safety and the
		environment.
4. Be	e able to	4.1. Implement systems and procedures for thermal
im	nplement	treatment operations in accordance with legislative
m	nanagement	and organisational requirements.
sy	rstems on an	4.2. Implement systems and procedures for the inspection
	utoclaving waste	of wastes entering the autoclaving waste thermal
th	nermal treatment	treatment process.
fa	acility	4.3. Make arrangements for the supply of materials,
		equipment and information needed to carry out
		autoclaving waste thermal treatment operations.





	4.4. Implement systems and procedures for the safe transfer of outputs from autoclaving waste thermal treatment	
	operations.	
	4.5. Make arrangements for the safe storage of outputs	
	from autoclaving waste thermal treatment operations.	
	4.6. Ensure that all procedures for autoclaving waste	
	thermal treatment operations are adhered to.	
5. Be able to manage	5.1. Implement work programmes that meet legislative and	
an autoclaving waste thermal	organisational requirements for autoclaving waste thermal treatment operations.	
treatment facility	5.2. Implement operating procedures that comply with	
	health, safety and environmental protection	
	requirements.	
	5.3. Ensure there are a sufficient number of trained	
	personnel available on the work site.	
	5.4. Monitor staff activity during autoclaving waste thermal	
	treatment operations to ensure the quality of the	
	organisation's work is maintained. 5.5. Check autoclaving waste thermal treatment	
	operations are effective.	
	5.6. Ensure that the outputs from autoclaving waste thermal	
	treatment operations are stored correctly in	
	accordance with legislative and organisational	
	procedures.	
	5.7. Record the output used created and exported from the site.	
	5.8. Record data on emissions to air and water in	
	accordance with legislative requirements.	
6. Be able to manage	6.1. Maintain records of wastes processed and the control	
information on an	parameters for autoclaving waste thermal treatment	
autoclaving waste thermal treatment	operations in accordance with legislative and organisational requirements.	
facility	6.2. Report compliance monitoring data in accordance	
	with legislative and organisational requirements.	



7. Be able to resolve problems which arise from the	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect autoclaving waste thermal treatment operations.			
	management of autoclaving waste thermal treatment facilities	7.2. Make arrangements for reprocessing or disposing of any materials that fail to meet the quality standards required for autoclaving waste thermal treatment operations.		
		7.3. Make arrangements for alternative energy supply when energy created on site is inadequate.		
		7.4. Implement procedures for dealing with spillages on site.7.5. Seek specialist advice to resolve situations which are outside the responsibility of the job role.		



Manage transfer and disposal from non-hazardous waste thermal treatment operations (OCS58)

Level: 4		Evidence	Portfolio	Comments
Learning Outcome	Assessment Criteria	Туре	Ref No	
1. Understand the	1.1. Describe the legislative requirements, regulations,			
legislative	codes of practice and guidance applicable to the			
requirements for	transfer and transport of non-hazardous waste from the			
transfer and disposal	site.			
from non-hazardous	1.2. Describe the planning permission, permit requirements			
waste thermal	and environmental management system (EMS) for the			
treatment	site.			
operations	1.3. Describe the Control of Substances Hazardous to			
	Health (COSHH) and risk assessment data used on the			
	site.			
	1.4. Describe the records required by legislation in relation			
	to:			
	The transfer of recovered non-hazardous wastes			
	The transport of recovered non-hazardous wastes			
	The disposal of recovered non-hazardous wastes			
	Emissions to air and water			
	1.5. Describe the legislative requirements for the export of			
	energy from the site.			
2. Understand the	2.1. Describe the organisational procedures for managing			
organisational	work activities.			
procedures for	2.2. Describe the organisational procedures for managing			
transfer and disposal	personnel.			
from non-hazardous	2.3. Describe the quality inspection, identification and			
waste thermal	handling requirements for the types of non-hazardous			
treatment	waste recovered at the site.			
operations	2.4. Describe the operating procedures for all machinery,			
	plant and equipment used on the site for loading			
	recovered wastes and residues.			





	2.5. Describe the on-site procedures for storing the outputs
	and residues from non-hazardous waste thermal
	treatment operations.
	2.6. Describe the organisational procedures for the loading,
	transfer and transport of non-hazardous waste from the
	site.
	2.7. Describe the organisational procedures for dealing with
	residues, out of specification recovered non-hazardous
	waste and any other rejects from the process.
	2.8. Describe the lifting and handling techniques that are
	suitable for the outputs and residues that are being
	transported from the site.
3. Know how to ide	ntify 3.1. Identify hazards associated with the loading, transfer
risks and manage	
work-related haz	ards relation to:
	Health and safety
	Environment
	3.2. Describe the control measures to reduce or eliminate
	risks to safety, health and the environment on the site.
	3.3. Describe the organisational procedures for dealing with
	spillages and emissions.
	3.4. State the types of personal protective equipment (PPE)
	required and how they must be used, maintained and
	stored.
	3.5. Describe the legal and organisational requirements for
	recording and reporting risks to health, safety and the
	environment.
4. Be able to	4.1. Implement systems and procedures for the transfer and
implement	transport of outputs from the non-hazardous waste
management	thermal treatment operation.
systems for transfe	
and disposal fron	
non-hazardous	treatment operation.
waste thermal	4.3. Implement systems and procedures for the safe transfer
treatment	of outputs from the non-hazardous waste thermal
operations	treatment operation.



	4.4. Implement systems and procedures to record energy created, used and exported from the site.
	4.5. Make arrangements for the supply of resources needed to carry out the loading, transport or energy transfer operations from the site.
	4.6. Make arrangements for the safe loading of the outputs and residues from the non-hazardous waste thermal treatment operation.
	4.7. Apply management systems to ensure that all procedures for waste transfer and disposal processes are adhered to.
5. Be able to manage information for the transfer and disposal	5.1. Ensure that transport documentation for all materials leaving the site is completed in order to comply with legislative requirements and organisational procedures.
from non-hazardous waste thermal treatment	5.2. Maintain records of all outputs and residues leaving the site in accordance with legislative requirements and organisational procedures.
operations	5.3. Report any failure to meet legislative requirements for emissions to air and water to the designated person.
6. Be able to resolve problems which arise during the transfer and disposal from non-hazardous waste thermal treatment	 6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: Loading Transfer Transport Disposal
operations	6.2. Implement and communicate procedures for dealing with spillages on site for all waste and materials.
	6.3. Make arrangements for alternative energy supply when energy created on the site is inadequate for process needs.
	6.4. Seek specialist advice to resolve situations which are outside the responsibility of the job role.



AO Guidance Note: Unit OC\$65

Recent feedback suggests that we must clarify requirements for two assessment criteria in unit OCS65 (manage an inspection visit at your site from regulatory bodies) which forms part of the Operator Competence Scheme qualifications.

Assessment Criterion 1.3: Explain how international regulations impact on your organisation

Evidence for this assessment criterion could include information on the EU regulations and directives applicable to all European Union member states that are relevant to the site activity. The Waste Framework Directive would be the primary legislation in all cases with additional specific legislation in particular cases. For example, a learner on a Waste Electrical and Electronic Equipment (WEEE) site may reference the Waste Framework Directive, the WEEE Directive, Batteries Directive etc.

If the learner's site exports waste to other countries, they should also include information on the legislation and regulation that will impact these activities (e.g. Basel Convention), as well as any relevant legislation and regulation they must comply with from the country they are exporting too.

Assessment Criterion 1.4: Explain how compliance is enforced by the following regulatory bodies and the sanctions they can take for noncompliance:

- Environmental regulator
- Health and safety regulator
- Planning regulator

Evidence for this assessment criterion could include information on:

- The processes Regulators use to confirm compliance.
- The various sanctions the Regulators can take (including civil sanctions).
- Any fines that can be applied.





Glossary

Dynamic risk assessment refers to the continuous process of identifying hazards and assessing risk as they arise during work activities so operators can take action to eliminate or reduce risk, as well as monitor and review existing control measures.

Hazard refers to a potential source of harm or negative health effect.

Hazardous waste refers to waste that is dangerous or potentially harmful to our health or the environment. Hazardous wastes can be liquids, solids, gases, or sludges.

Health and safety refers to the regulations and procedures intended to prevent accident or injury.

Inert waste refers to waste that does not experience any significant physical, chemical or biological transformations e.g. it will not dissolve, burn, react, biodegrade or adversely affect other matter.

Operator refers to the person who has control over the operation of a regulated facility

Organisational procedures refer to a series of principles, rules and guidelines designed to ensure organisations reach their long-term goals.

Personal protective equipment (PPE) refers to protective clothing, helmets, goggles or other equipment designed to protect your body from harm.

Risk refers to a situation that exposes someone or something of value to danger.

Risk assessment refers to a systematic process you are required to carry out by law to evaluate potential risks that may be involved in an activity.

Training refers to an organised activity designed to teach a person a particular skill or behaviour to improve performance.

Waste refers to a material, substance or by-product eliminated or discarded as no longer useful or required after the completion of a process.

Waste hierarchy prioritises ways of dealing with waste based on how good they are for the environment.

Working at height refers to any place where a person could fall a distance liable to cause personal injury.



Qualification Structure

Mandatory Units

The learner must complete all of the units from the following group, before selecting one pathway.

Ofqual Code	Title	Level	Code
A/508/0756	Maintain health and safety in the waste and resource management industry	4	OCS01
F/508/0757	Manage the environmental impact of work activities	4	OCS02
F/508/0760	Manage the movement, sorting and storage of waste	4	OCS05
R/508/0861	Control work activities on a waste management facility	4	OCS06
K/508/0882	Identify and implement improvements to waste management operations	4	OCS07
M/508/0883	Control maintenance and other engineering operations	4	OCS08
T/508/0884	Procedural compliance	4	OCS09
A/508/0885	Manage and maintain systems for responding to emergencies	4	OCS10
Y/508/0974	Manage an inspection visit at your site from regulatory bodies	4	OCS65

Pyrolysis and Gasification Hazardous Waste Pathway – AOC01a

Mandatory Unit Group

Learners that select this pathway must complete all of the units from the following group:

Ofqual Code	Title	Level	Code
F/508/0886	Manage the reception of hazardous waste	4	OCS11
A/508/0997	Manage site operations at a gasification and pyrolysis waste thermal treatment facility	4	OCS54
K/508/0994	Manage transfer and disposal from hazardous waste thermal treatment operations	4	OCS56

Autoclaving Hazardous Waste Pathway – AOC01b

Mandatory Unit Group

Learners that select this pathway must complete all of the units from the following group:

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Ofqual Code	Title	Level	Code
F/508/0886	Manage the reception of hazardous waste	4	OCS11
T/508/0996	Manage site operations at an autoclaving waste thermal treatment facility	4	OCS55
K/508/0994	Manage transfer and disposal from hazardous waste thermal treatment operations	4	OCS56

Pyrolysis and Gasification Non-Hazardous Waste Pathway – AOC01c

Mandatory Unit Group

Learners that select this pathway must complete all of the units from the following group:

Ofqual Code	Title	Level	Code
J/508/0887	Manage the reception of non-hazardous waste	3	OCS12
A/508/0997	Manage site operations at a gasification and pyrolysis waste thermal treatment facility	4	OCS54
D/508/0989	Manage transfer and disposal from non-hazardous waste thermal treatment operations	4	OC\$58

Autoclaving Non-Hazardous Waste Pathway – AOC01d

Mandatory Unit Group

Learners that select this pathway must complete all of the units from the following group:

Ofqual Code	Title	Level	Code
J/508/0887	Manage the reception of non-hazardous waste	3	OCS12
T/508/0996	Manage site operations at an autoclaving waste thermal treatment facility	4	OCS55
D/508/0989	Manage transfer and disposal from non-hazardous waste thermal treatment operations	4	OC\$58

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