



CIWM

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 (non-
hazardous 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 (OCS06)

- Identify and implement improvements to waste management operations (OCS07)
- Control maintenance and other engineering operations (OCS08)
- Procedural compliance (OCS09)
- Manage and maintain systems for responding to emergencies (OCS10)
- 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 (OCS54)
- 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 (OCS55)
- Managing transfer and disposal from hazardous waste thermal treatment options (OCS56)

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 (OCS54)
- Manage transfer and disposal from non-hazardous waste thermal treatment operations (OCS58)

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 (OCS55)
- Manage transfer and disposal from non-hazardous waste thermal treatment operations (OCS58)

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 Centre	These centres are training organisations that have met our strict quality standards and have been approved to 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 undertake work 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 relates to 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	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.
Keep	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

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

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Know the requirements of health and safety legislation in the waste and resource management industry.	1.1. Explain the main legal requirements of health and safety legislation on waste and resource management facilities, in relation to: • employers • employees • 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 hazards, risks, control measures and monitoring associated with a waste and resource management environment.	2.1. Explain the difference between a hazard and a risk.			
	2.2. Explain how to complete a risk assessment.			
	2.3. Explain the difference between a formal and dynamic risk assessment.			
	2.4. Explain the hierarchy of 'control measures'.			
	2.5. Describe the characteristics of hazardous 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 that hazards and risks are controlled safely and effectively on site.	3.1. Conduct a risk assessment and implement the control measures.			
	3.2. Maintain accurate records of workplace irregularities.			
	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 organisational health and safety procedures on site.	4.1. Implement workplace health and safety procedures in relation to: • safe use of plant, machinery, and equipment • safe use of chemicals • fire risk • first aid • 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 site.	5.1 Review performance of health and safety on 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 (OCS02)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
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. Understand how to assess the environmental impact of work activities and how this can be minimised.	2.1. Explain how to assess the impact of work activities and resources in the environment, including risk analysis.			
	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 managing the risk of fires on site.	3.1. Explain the legal requirements and current guidance for 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 use, with recommendations for improvement.			
5. Be able to organise work activities and resource use to minimise environmental impact.	5.1. Organise resources in own area of responsibility to reduce environmental 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.			
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.			
	7.2. Identify the types and locations of potential ignition sources on site.			
	7.3. Identify existing control measures aimed at reducing the risk of fire and the impact should fire occur.			

	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 (OCS05)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
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 storage of waste.	requirements and organisational 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 vehicles, plant and crews on sites which handle waste.	4.1 Identify hazards and minimise risks to health, safety and the environment that 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 communicate information.	5.1 Give instructions for moving, sorting and 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 which arise during or resulting from the movement, sorting and storage of waste.	6.1 Recommend steps to rectify any staff shortages, equipment deficiencies or external factors that prevent the 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		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. 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 facility.	5.1. Communicate the work programmes and operational instructions verbally and in writing.			
	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 facility.	prevent the site activities from being carried out.			
	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		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Know how to identify improvements to waste management operations.	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.			
	2.5. Explain how to monitor implementation of the plan against the agreed specifications, schedules and budget.			
	2.6. Explain how to rectify any deviations from the plan, specifications, schedules or budget.			
	2.7. Describe techniques for evaluating the project, and how to report them.			
3. Be able to monitor waste management operations to identify potential improvements.	3.1. Use information to identify potential 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 management operations.	4.1. Use a range of information sources to analyse and identify the most suitable improvements.			
	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 improvements to waste management operations.	7.1. Resolve routine problems within the responsibility of the job role.			
	7.2. Refer problems and conditions outside the responsibility of the job role to correct personnel.			

Control maintenance and other engineering operations (OCS08)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the legislative requirements and organisational procedures for controlling maintenance and other engineering operations.	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 • buildings • structures			
	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.			
	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.			
2. Understand how to produce maintenance schedules.	2.1. Identify the time and resources needed 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.	3.1. Explain why it is important to check 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 effectively.	5.1. Make maintenance schedules available to the people involved in implementing them and to others who would be affected by them.			
	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 manage maintenance and engineering personnel.	6.1. Ensure that all personnel complete maintenance and other engineering activities within performance requirements and timescales.			
	6.2. Ensure operatives on site implement and maintain systems to record faults and initiate repairs.			
7. Be able to monitor maintenance and other engineering operations.	7.1. Monitor and review the quality, safety and environmental impact of maintenance and other engineering activities to ensure they are in accordance with organisational procedures.			
	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 No	Comments
Learning Outcome	Assessment Criteria			
1. Understand how to comply with organisational procedures and legislative requirements.	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the processes carried out at the site.			
	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 maintain operating	2.1. Establish regular monitoring and review schedules for all site operations to maintain compliance with procedures.			

procedures required for legislative compliance.	2.2. Complete monitoring and review 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 information to maintain organisational procedures.	3.1. Obtain information about new legislative requirements, approved codes of practice and other industry 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 compliance issues.	4.1. Take steps to deal with any failures with compliance.			
	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)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the legislative requirements and organisational procedures for maintaining effective systems for responding to emergencies.	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.			
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.			
4. Be able to maintain systems for responding to emergencies.	4.1. Review emergency procedures, equipment and resources required to maintain systems.			
	4.2. Obtain feedback from personnel participating in emergency drills to identify potential improvements.			

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

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

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
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.			

3. Understand how to prepare for an inspection from a regulatory body.	3.1 Explain how to prepare for an inspection visit, including: - 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 inspection visit from a regulatory body.	4.1 Plan arrangements for a potential inspection visit in terms of: - 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)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. 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.			
	2.2. Identify hazards associated with the 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.			
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 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 a gasification and pyrolysis waste thermal treatment facility (OCS54)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the specific regulation and requirements for managing a gasification and pyrolysis waste thermal treatment facilities	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to gasification and pyrolysis waste thermal treatment facilities.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 procedures for managing a gasification and pyrolysis waste	2.1. Describe the organisational procedures for managing work activities on site.			
	2.2. Describe the organisational procedures for managing personnel on site.			
	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.			
	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 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 systems on a gasification and pyrolysis waste thermal treatment facility	4.1. Implement systems and procedures for thermal treatment operations in accordance with legislative and organisational requirements.			
	4.2. Implement systems and procedures for the inspection of wastes entering the gasification and pyrolysis waste thermal treatment process.			
	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 a gasification and pyrolysis waste thermal treatment facility	5.1. Implement work programmes that meet legislative and organisational requirements for gasification and pyrolysis waste thermal treatment operations.			
	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 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 information on a gasification and pyrolysis waste	6.1. Maintain records of wastes processed and the control parameters for gasification and pyrolysis waste thermal treatment operations in accordance with legislative 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 management of gasification and pyrolysis waste thermal treatment facilities	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect gasification and pyrolysis waste thermal treatment operations.			
	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.			
	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 (OCS56)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the legislative requirements for transfer and disposal from hazardous waste thermal treatment operations.	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of hazardous waste from the site.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 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 procedures for transfer and disposal from hazardous waste thermal treatment operations.	2.1. Describe the organisational procedures for managing work activities.			
	2.2. Describe the organisational procedures for managing personnel.			
	2.3. Describe the quality inspection, identification and handling requirements for the types of hazardous waste recovered at the site.			
	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 identify risks and manage work-related hazards.	3.1. Identify hazards associated with the loading, transfer and transport of hazardous waste from the site 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 systems for transfer and disposal from hazardous waste thermal treatment operations.	4.1. Implement systems and procedures for the transfer and transport of outputs from the hazardous waste thermal treatment operation.			
	4.2. Implement systems and procedures for the disposal of residues from the hazardous waste thermal treatment operation.			
	4.3. Implement systems and procedures for the safe transfer of outputs from the hazardous waste thermal 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 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 thermal treatment operations.	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.			
	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 operations.	6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: • loading • transfer • transport • disposal			
	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		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. 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.			
	2.2. Identify hazards associated with the 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.			
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 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 (OCS55)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the specific regulation and requirements for managing an autoclaving waste thermal treatment facilities	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to autoclaving waste thermal treatment facilities.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 organisational procedures for managing autoclaving waste thermal treatment facilities	2.1. Describe the organisational procedures for managing work activities on site.			
	2.2. Describe the organisational procedures for managing personnel on site.			
	2.3. Describe the operating procedures for all machinery, plant and equipment used on the site for handling and 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 identify risks and manage work-related hazards	3.1. Identify hazards associated with to autoclaving 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 systems on an autoclaving waste thermal treatment facility	4.1. Implement systems and procedures for thermal treatment operations in accordance with legislative and organisational requirements.			
	4.2. Implement systems and procedures for the inspection of wastes entering the autoclaving waste thermal treatment process.			
	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 an autoclaving waste thermal treatment facility	5.1. Implement work programmes that meet legislative and organisational requirements for autoclaving waste thermal treatment operations.			
	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 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 management of autoclaving waste thermal treatment facilities	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect autoclaving waste thermal treatment operations.			
	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 (OCS56)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the legislative requirements for transfer and disposal from hazardous waste thermal treatment operations.	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of hazardous waste from the site.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 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 procedures for transfer and disposal from hazardous waste thermal treatment operations.	2.1. Describe the organisational procedures for managing work activities.			
	2.2. Describe the organisational procedures for managing personnel.			
	2.3. Describe the quality inspection, identification and handling requirements for the types of hazardous waste recovered at the site.			
	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 identify risks and manage work-related hazards.	3.1. Identify hazards associated with the loading, transfer and transport of hazardous waste from the site 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 systems for transfer and disposal from hazardous waste thermal treatment operations.	4.1. Implement systems and procedures for the transfer and transport of outputs from the hazardous waste thermal treatment operation.			
	4.2. Implement systems and procedures for the disposal of residues from the hazardous waste thermal treatment operation.			
	4.3. Implement systems and procedures for the safe transfer of outputs from the hazardous waste thermal 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 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 thermal treatment operations.	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.			
	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 operations.	6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: • loading • transfer • transport • disposal			
	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 (OCS12)

Level: 3		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. 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 non-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 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 the reception of non-hazardous waste.	2.1. Describe the organisational environmental policy and procedures applicable to the site.			
	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 systems and procedures to manage the reception of non-hazardous waste.	3.1. Implement systems and procedures for the reception and validation of non-hazardous wastes in accordance with 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 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 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 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)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the specific regulation and requirements for managing a gasification and pyrolysis waste thermal treatment facilities	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to gasification and pyrolysis waste thermal treatment facilities.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 procedures for managing a gasification and pyrolysis waste	2.1. Describe the organisational procedures for managing work activities on site.			
	2.2. Describe the organisational procedures for managing personnel on site.			
	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.			
	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 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 systems on a gasification and pyrolysis waste thermal treatment facility	4.1. Implement systems and procedures for thermal treatment operations in accordance with legislative and organisational requirements.			
	4.2. Implement systems and procedures for the inspection of wastes entering the gasification and pyrolysis waste thermal treatment process.			
	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 a gasification and pyrolysis waste thermal treatment facility	5.1. Implement work programmes that meet legislative and organisational requirements for gasification and pyrolysis waste thermal treatment operations.			
	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 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 information on a gasification and pyrolysis waste	6.1. Maintain records of wastes processed and the control parameters for gasification and pyrolysis waste thermal treatment operations in accordance with legislative 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 management of gasification and pyrolysis waste thermal treatment facilities	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect gasification and pyrolysis waste thermal treatment operations.			
	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.			
	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 Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the legislative requirements for transfer and disposal from non-hazardous waste thermal treatment operations	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of non-hazardous waste from the site.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 organisational procedures for transfer and disposal from non-hazardous waste thermal treatment operations	2.1. Describe the organisational procedures for managing work activities.			
	2.2. Describe the organisational procedures for managing personnel.			
	2.3. Describe the quality inspection, identification and handling requirements for the types of non-hazardous waste recovered at the site.			
	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 risks and manage work-related hazards	3.1. Identify hazards associated with the loading, transfer and transport of non-hazardous waste from the site 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 systems for transfer and disposal from non-hazardous waste thermal treatment operations	4.1. Implement systems and procedures for the transfer and transport of outputs from the non-hazardous waste thermal treatment operation.			
	4.2. Implement systems and procedures for the disposal of residues from the non-hazardous waste thermal treatment operation.			
	4.3. Implement systems and procedures for the safe transfer of outputs from the non-hazardous waste thermal 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 from non-hazardous waste thermal treatment operations	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.			
	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 operations	6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: • Loading • Transfer • Transport • Disposal			
	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 (OCS12)

Level: 3		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. 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 non-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 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 the reception of non-hazardous waste.	2.1. Describe the organisational environmental policy and procedures applicable to the site.			
	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 systems and procedures to manage the reception of non-hazardous waste.	3.1. Implement systems and procedures for the reception and validation of non-hazardous wastes in accordance with 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 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 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 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.			
	5.3. 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 (OCS55)

Level: 4		Evidence Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the specific regulation and requirements for managing an autoclaving waste thermal treatment facilities	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to autoclaving waste thermal treatment facilities.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 organisational procedures for managing autoclaving waste thermal treatment facilities	2.1. Describe the organisational procedures for managing work activities on site.			
	2.2. Describe the organisational procedures for managing personnel on site.			
	2.3. Describe the operating procedures for all machinery, plant and equipment used on the site for handling and 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 identify risks and manage work-related hazards	3.1. Identify hazards associated with to autoclaving 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 systems on an autoclaving waste thermal treatment facility	4.1. Implement systems and procedures for thermal treatment operations in accordance with legislative and organisational requirements.			
	4.2. Implement systems and procedures for the inspection of wastes entering the autoclaving waste thermal treatment process.			
	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 an autoclaving waste thermal treatment facility	5.1. Implement work programmes that meet legislative and organisational requirements for autoclaving waste thermal treatment operations.			
	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 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 management of autoclaving waste thermal treatment facilities	7.1. Take action to rectify any staff shortages, equipment deficiencies or external factors that affect autoclaving waste thermal treatment operations.			
	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 Type	Portfolio Ref No	Comments
Learning Outcome	Assessment Criteria			
1. Understand the legislative requirements for transfer and disposal from non-hazardous waste thermal treatment operations	1.1. Describe the legislative requirements, regulations, codes of practice and guidance applicable to the transfer and transport of non-hazardous waste from the site.			
	1.2. Describe the planning permission, permit requirements and environmental management system (EMS) for the site.			
	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 organisational procedures for transfer and disposal from non-hazardous waste thermal treatment operations	2.1. Describe the organisational procedures for managing work activities.			
	2.2. Describe the organisational procedures for managing personnel.			
	2.3. Describe the quality inspection, identification and handling requirements for the types of non-hazardous waste recovered at the site.			
	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 risks and manage work-related hazards	3.1. Identify hazards associated with the loading, transfer and transport of non-hazardous waste from the site 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 systems for transfer and disposal from non-hazardous waste thermal treatment operations	4.1. Implement systems and procedures for the transfer and transport of outputs from the non-hazardous waste thermal treatment operation.			
	4.2. Implement systems and procedures for the disposal of residues from the non-hazardous waste thermal treatment operation.			
	4.3. Implement systems and procedures for the safe transfer of outputs from the non-hazardous waste thermal 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 from non-hazardous waste thermal treatment operations	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.			
	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 operations	6.1. Take action to rectify any staff or transport shortages, equipment deficiencies or external factors that affect operations, including: • Loading • Transfer • Transport • Disposal			
	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 OCS65

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 non-compliance:

- **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:

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	OCS58

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	OCS58

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