



This form will report compliance with your permit as determined by an Environment Agency officer

Site	Allerton Waste Recovery Park EPR/KP3808PN				Permit Ref	KP3808PN		
Operator/ Permit holder	THALIA AWRP ODC LIMITED							
Date	29/07/2025				Time in	10:00	Out	14:30
What parts of the permit were assessed	Discussion on Schedule 5 notifications/Improvement Conditions							
Assessment	Site Inspection	EPR Activity:	Installation	X	Waste Op		Water Discharge	
Recipient's name/position	HSEQ Coordinator							
Officer's name					Date issued	02/09/2025		

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations (EPR). A detailed explanation and any action you may need to take are given in the Detailed Assessment of Compliance (section 2) and the Actions (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our [Compliance Classification Scheme](#) (CCS). CCS scores can be consolidated or suspended, where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your [local office](#).

Permit Conditions and Compliance Summary			Condition(s) breached
a) Permitted activities	1. Specified by permit	N	
b) Infrastructure	1. Engineering for prevention & control of pollution	A	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	A	
	5. Plant and equipment	A	
c) General management	1. Staff competency/ training	N	
	2. Management system & operating procedures	A	
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	A	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	A	
	2. Noise	A	
	3. Dust/fibres/particulates & litter	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	A	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),

A = Assessed (no evidence of non-compliance), **N** = Not assessed, **NA** = Not Applicable, **O** = Ongoing non-compliance – not scored

MSA, MSB, TCM = Management System condition A, Management System Condition B and Technically Competent Manager condition which are environmental permit conditions from Part 3 of schedule9 EPR (see notes in Section 5/6).

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response			

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- the part(s) of the permit that were assessed (e.g. maintenance, training, combustion plant, etc)
- where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- any non-compliances identified
- any non-compliances with directly applicable legislation
- details of any multiple non-compliances
- information on the compliance score accrued inc. details of suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

Inspection Summary

This was a pre-arranged inspection focussing of the Allerton Waste Recovery Park with a focus on (i) Strategic review of CO emissions, (ii) biogas releases from the associated Anaerobic Digestion (AD) plant, (iii) abnormal operation and (iv) outstanding Improvement Conditions. A site tour was also undertaken with a priority given to review of the emissions control system.

Persons Seen

HSEQ Coordinator
Technical Director
Operations Manager
Environmental Business Partner

Documents Seen

No specific documents requested in advance of the visit. During the inspection the following documents were reviewed;

AWRP-AD-OP-PR-025 Starting the AD engines
AWRP-AD-OP-PR-026 Resetting the AD Flare
Greenhouse gas calculation spreadsheet (from AD)

Observations and Findings

1. At the time of inspection the weather was sunny, approximately 21C with light winds. Very little litter was noted along the main highway serving the site and no odour could be detected.

Carbon Monoxide (CO) Strategic review

2. There has been a significant number of high CO half hourly readings from both incineration lines resulting in Schedule 5 notifications to the EA. The number has increased markedly during 2024 although a significant number were also recorded during 2023. Whilst these are routinely classed as Category 4 permit breaches - due to their insignificant impact on the Air Quality Standard - the number is excessive and has triggered a review by the operator.

3. Concern was raised by the EA at a previous inspection of the facility on 11 Feb 2025 (CAR ID KP3808PN/0566583) and Thalia outlined their terms of reference for this review - namely, (i) Waste acceptance, (ii) Maintenance, (iii) Combustion dynamics, (iv) Communications, (v) Review and RCA, (vi) Final report of findings to EA and Local Authority. A review of the outputs of the review were presented by Thalia.

4. A series of short term and longer term actions/improvements have been identified. All of the short term actions have been implemented and closed.

5. All bulky waste and POP containing streams is now shredded, and metal recovered, prior to entry into the reception pit. This should lead to better mixing and waste management and was introduced

from June. Bulky waste in particular has long been an issue and a cause of poor waste loading of the grate and subsequent combustion. Thalia verbally stated that there has been an improvement in the bulky waste deliveries although there is still an issue with batteries and construction materials.

6. In addition to shredding of bulky waste, the site have reviewed their bunker management and waste acceptance plans. Relevant SOPs have been reviewed and updated. All relevant staff have undertaken in-depth training (half day formalised rather than toolbox talks). Note - the content of these reviews/training packages was not reviewed during the inspection.

7. A significant issues was identified with some of the oxygen analysers within the furnace. Reliability issues were identified leading to fluctuations in oxygen and poor control of combustion conditions. As part of the review all impacted analysers have undergone a full service against the manufacturers functional specification.

8. Thalia have reviewed and amended the frequency for deposit removal from tube bundles , predominantly from the first and second pass. In particular a significant amount of material was removed from the superheater bundle at the October shutdown.

9. A number of longer term modifications have been identified. Specific action areas include (i) review of possible improvements to mixing of AD digestate within the reception pit (ii) Specialist external support (iii) consideration for a separate unit to pretreat bulky waste/POPs prior to the reception hall and (iv) assessment of the benefits of soot blowing and water washing. Although early in the implementation phase there have been only three minor half hourly exceedences during July and August (all for Line 1) which, hopefully, will represent a step change in performance.

10. Thalia are considering a permit variation to change the CO half hourly ELV (100 percentile) to the 10 minute average ELV (97 percentile). This approach would be acceptable and would be considered and a minor technical variation. In order to progress such a variation the site must submit an impact assessment for operations, under worst case, at the higher numerical limit. Changes to the plants emissions data handling and reporting systems. Such planned changes should be presented within the variation application.

Review of AD Biogas releases

10. There has been a significant number of biogas releases to atmosphere during 2025 via the Pressure Relief Valve (PRV) on the AD gas holder.

11. It is noted that many of these occurrences are for extremely short periods (seconds) although a number are for more appreciable durations.

12. The cause of these PRV lifting events can be broadly attributed to one of three causes (i) Site power outage - in such events the plant fail safe is for the PRV to open, (ii) flare/gas engines failed to start, and (iii) Hi and Hi Hi issues with the level sensor.

13. The EA accepts that releases due to the National Grid power cuts are not technically avoidable and in these cases the plant performed as per design.

14. The AD plant is not manned constantly unlike the EFW. During night shift the AD is remotely monitored by EFW staff. Improvements have been identified to provide more control over the AD during these periods including, laptop to allow remote control by EFW technicians, audible alarms within the EFW control room and modified SOPs/training to facilitate restarting of the flare and gas engines.

15. The most significant number of PRV lifting events can be attributed to issues with the gas bag level sensor. In many cases spiking in levels are observed, both Hi (90%) and Hi Hi (97%) - these spiking events occurring so rapidly operatives unable to react. Concern raised by EA as to whether the level sensor is fit for this duty and discussions are ongoing with the vendor.

16. Thalia are reviewing the potential to include a 30 second delay in the logic control to discount such spiking events as they are not considered to be real events. Application of a delay will enable the reading to "settle" back to the actual reading in the interim period.

17. A number of activities to improve the AD plant have been implemented including full service of the flare unit.

18. The CO₂ equivalents have been calculated by Thalia for the accumulated biogas (as methane) events. The total amount of CO₂e discharged is insignificant - in the order of Kgs - resulting in Cat 4 emissions due to insignificant impacts.

Abnormal Operation and reporting

19. Conditions for abnormal operation were discussed. In summary, abnormal operation is applicable to periods of abatement plant and CEM data loss. Pollutants impacted may be above the half hourly ELV without recording of a breach - unless the value is so high it causes a detrimental environmental impact. As discussed, abnormal operation is not applicable to either CO or TOC emissions as these are predominantly due to waste management and combustion control. In addition, separate ELVs are applicable to CO, TOC and PM during abnormal operation.

20. Thalia indicated that there are errors in the number of notifications to the EA during 2024 and part of 2024.

21. Following the modified data submission a further inspection *may* be required to discuss and action as appropriate. *Note - failure to notify would be a specific failure to comply with conditions 1.1.1 and 4.3*

Improvement Condition 5 - CIRIA C736 review for AD

22. The sites AD is semi-dry resulting in a high solids digestate. IC5 requires a review of the provisions for secondary and tertiary containment against the requirements of CIRIA C736.

23. It was agreed that the site should focus on Source - pathway - receptor trios and the specific properties of the digestate material. It is highly unlikely that this material would flow resulting in the event of any loss of primary containment. A modified submission will be provided to the EA for review.

QAL2/AST for gas engine CEM

24. During the OMA conducted during 2024 it was noted that there is no Quality assurance in place for the AD gas engine CEM units. However, Thalia have confirmed that these CEM units are just for in-process control monitoring and not for compliance. The permit specifies periodic monitoring and in all cases a specific MCERTS accredited contractor is used for compliance monitoring. As such, detailed quality assurance in-line with BS EN 14181 is not required. However, should these units be used in future for compliance monitoring then a full assurance plan will be required including development of a QAL3 process.

Site Tour

25. A short site tour was undertaken with emphasis on the control room and tipping hall.

26. Levels within the reception pit were lower than previously observed. Discussions with the crane operator demonstrated good levels of mixing of different CV wastes.

27. Snapshot of pollutants as follows;

Line 1; NOX 179.9/CO 8.54/SO₂ 17.12/TOC 0.27/HCL 4.99/PM 0.59

Line 2: NOX 163/CO 0.75/SO₂ 23.81/TOC 0.29/HCL 4.53/PM 0.29

Electrical output 27MWe

Conclusions and Findings

28. It would appear sound progress with the CO reduction programme. This topic to remain a standing agenda item until profiles are fully compliant.

29. Further discussions required once full modified emissions data has been submitted and reviewed.

30. As with item 28 - improvements in the biogas control systems will be a standing agenda item.

31. Further inspections in-line with CAP including an OTNOC inspection against the reporting template.

Section 3- Enforcement Response

Only one of the boxes below should be ticked

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence* and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

**Non-compliance with MSA, MSB & TCM do not constitute an offence but can result in the service of a compliance, suspension and/or revocation notice.*

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.

X

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

We will now consider what enforcement action is appropriate and notify you, referencing this form.

Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

Criteria Ref.	CCS Category	Action Required / Advised	Due Date
See Section 1 above			

Section 5 - Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- advise on corrective actions verbally or in writing
- require you to take specific actions in writing
- issue a notice
- require you to review your procedures or management system
- change some of the conditions of your permit
- decide to undertake a full review of your permit

Any breach of a permit condition is an offence* and we may take legal action against you.

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and or suspension or revocation of the permit.
- A civil sanction Enforcement Undertaking (EU) offer may also be available to you as an alternative enforcement response for this/these offence(s).

See our Enforcement and Civil Sanctions guidance for further information

A breach of permit condition **MSA, **MSB** & **TCM** is not an offence but may result in the service of a notice requiring compliance and/or suspension or revocation of the permit.*

This report does not relieve the site operator of the responsibility to

- ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- ensure you comply with other legislative provisions which may apply.

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance which could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

MSA, MSB & TCM are conditions inserted into certain permits by Schedule 9 Part 3 EPR

MSA requires operators to manage and operate in accordance with a written management system that identifies and minimises risks of pollution.

MSB requires that the management system must be reviewed, kept up-to-date and a written record kept of this.

TCM requires the submission of technical competence information.

Section 6 – General Information

Data protection notice

The information on this form will be processed by the Environment Agency to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). The Environment Agency may also use and/or disclose it in connection with:

- offering/providing you with its literature/services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

The Environment Agency may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The Environment Agency will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within 28 days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If a permit holder disagrees with the CAR form, they should raise their concerns to the officer or team which issued the form. This must be done within 14 calendar days of receipt. If the response does not resolve the issue, a permit holder can request an appeal of the regulatory decision. This request must be made within 28 calendar days of receipt of the response. More details on our regulatory appeals process can be found at

<https://www.gov.uk/guidance/appeal-a-regulatory-decision-from-the-environment-agency>.

If you are still dissatisfied, you can make a complaint to the Ombudsman. For advice on how to complain to the Parliamentary and Health Service Ombudsman phone their helpline on 0345 015 4033.