

Breach of Environmental Permit Procedure (Air)

1. Summary

We have a legal obligation to ensure that we operate within the boundaries of our Environmental Permit EPR/KP3808PN.

A copy of the Environmental Permit can be found on SharePoint: AWRP > HSEQ > Environment > Permits and Permissions.

2. Scope

AWRP's Environmental Permit states that 'There shall be no point source emissions to air, water or land'. This procedure outlines the process to follow in the event of a breach to air and to whom it applies.

3. Definitions

3.1. Definition of specific terms used within the document.

- EfW – Energy from Waste
- AD – Anaerobic Digestion
- STL – Shift Team Leader
- POM – Principal Operations Manager
- HSEQ – Principal HSEQ / Compliance Manager
- Delegate Operator – Operator Appointed by STL or AD Lead
- Out of Hours Delegate – STL Outside of AD Operating Hours
- EA – Environment Agency

3.2. Definition of terms found within the Environmental Permit.

- Abatement Equipment – Means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.
- Abnormal Operation – Means: any technically unavoidable stoppages, disturbances, or failures of the plant or the measurement devices. Abnormal operation starts as defined in condition 2.3.12 and ends as defined in condition 2.3.13. Abnormal operation is limited to 4 hours for a single occurrence and a total of 60 hours per year per line.
- CEM – Continuous Emission Monitor.
- Daily Average Emissions Value – Means the average of at least 43 valid half hourly averages or for CO the average of at least 43 valid half hourly averages.
- Valid Half Hourly Values – Shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals. The half-hourly average shall

in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. The number of half-hourly averages so validated shall not exceed 5 per day.

- Valid Daily Values – Shall be calculated using the average of valid half hourly averages over a calendar day excluding half hourly averages during periods of abnormal operation. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined to not be valid.
- Other Than Normal Operating Conditions (OTNOC) - Defined in the UK Waste Incineration BAT Conclusions Interpretation as periods when the plant is in start-up, shut-down or abnormal operation.
- Other OTNOC – Situations can include but are not limited to the activation of emergency release valves, ELV breaches not covered by abnormal operation provisions, or emergency shut-downs.

4. EfW Continuously Measured Emission Limits

As part of our Environmental Permit, Schedule 3 (Appendix 1) – Emissions and Monitoring outlines emission to air limits and monitoring requirements.

Table 1: EFW Emission limits pertaining to the parameters that are measured continuously for A2 and A3 are shown below:

Parameter	½ Hourly Average Emission Value. (mg/m3)	Daily Average Emission Value (mg/m3)
Particulates	30	5
TOC	20	10
HCL	60	8
CO	100	50
SO2	200	40
NOx	400	180
Ammonia	No Limit	15

5. AD Measured Emission Limits

Table 2: AD Emission limits pertaining the parameters that are measured continuously for A4 and A5 (gas engine exhausts gases) are shown below:

Parameter	Average over Sample Period (mg/m3)
Oxides of nitrogen (NO and NO2 expressed as NO2)	500
Carbon Monoxide	1400
Sulphur Dioxide	350

Table 3: AD Emission limits pertaining to the parameters that are measured for A7 (emergency flare stack) are shown below:

Parameter	Average over Sample Period (mg/m3)
Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	150
Carbon Monoxide	50
Total VOCs	10

Please Note: Monitoring for the above shown in Table 3 is only applicable if the emergency flare has been operational for more than 10% of a year (876 hours).

All releases of Biogas must also be investigated, recorded and reported as per the process stated in Section 10.

6. Roles and Responsibilities EfW

6.1. EfW Operator

- Continuously monitor CEMS and Plant
- Log any and all N/A readings in the shift log and report these to the STL – this is an abnormal or invalid reading.
- Control any chance of an emission exceedance.
- If exceedance is identified – following stabilising plant, immediately contact STL and immediately log time and event in the shift day log.
- Immediately investigate the cause of the exceedance/invalid reading and present to STL once confident of the cause.
- If an AD fault code is identified, following stabilising plant, immediately contact STL and immediately log time and event in the shift day log.

6.2. Duty STL

- Check daily readings just after midnight every day.
- Confirm stability of the plant.
- Review the evidence provided by the EfW Operator following exceedance or invalid reading.
- Either confirm the cause or further investigate with the control room operator until confident of cause.
- Immediately summarise the event using EcoOnline. Refer to Section 11.
 - Ensure all evidence (trends / photographs etc.) are scanned in and attached to the Eco for review by Day STL/POM/HSEQ (This should be submitted by EcoOnline not email).
- If confident the issue is maintenance related – raise Work Order on Pirana.
- Complete the permit compliance section of the STL Log with all information for all instances.
- Complete the Schedule 5 Part A following on from an event and send to the HSEQ Team for review within that same shift.

- Act as the AD Delegate out of hours.
- Ensure that AD fault codes are recorded within the shift log and the AD Lead is notified via a verbal handover and in email with the fault code, and date and time of event.

6.3. Day STL

- Review EcoOnline and evidence submitted events and categorise them into Exceedance, Abnormal Operating, OTNOC, OO, or Invalid.
- Send internal notification and details of the event and its categorisation. Refer to Section 12.
- Carry out an investigation into the event and update the EcoOnline entry if more information is required.
- Update permit compliance section of the STL Log with any further information.
- Complete the Schedule 5 Part B following on from the investigation and send to the HSEQ Team for review within 14 days of the event.
- Report at monthly ops review –
 - Summary of exceedance per line.
 - Summary of abnormal operations per line, including total number of abnormal operating hours.

7. Roles and Responsibilities AD

7.1. AD Operator

- Monitor CEMs & Plant.
- Log any and all exceedances, releases of biogas, invalid readings in the shift log and report these to the AD Lead.
- Control any chance of an emission exceedance.
- If exceedance is identified – following stabilising plant, immediately contact AD Lead and immediately log time and event in the shift day log.
- Immediately investigate the cause of the exceedance, release of biogas, or invalid reading and present to the AD Lead once confident of the cause.

7.2. AD Lead

- Check daily readings.
- Confirm stability of the plant.
- Review the evidence provided by the AD Operator following an exceedance, release of biogas, or invalid reading.
- Either confirm the cause or further investigate with the AD Technical Director until confident of cause.
- Immediately summarise the event using EcoOnline. Refer to Section 11.
 - Ensure all evidence (trends / photographs etc.) are scanned in and attached to the Eco for review by Technical Director/POM/HSEQ (This

should be submitted by EcoOnline not email).

- Send internal notification and details of the event whether it be an exceedance, abnormal operation, or invalid.
- Complete the Schedule 5 Part A following on from an event and send to the HSEQ Team for review within that same shift.
- Complete the Schedule 5 Part B following on from the investigation and send to the HSEQ Team for review within 14 days of the event.
- If confident the issue is maintenance related – raise Work Order on Pirana.
- Attend Internal Quarterly Review of AD Events.
- Attend Quarterly Review of AD Events with EA.

7.3. AD Technical Director

- Review EcoOnline and evidence submitted events.
- Either confirm the cause or further investigate with the AD Lead until confident of cause.
- Update the EcoOnline entry if more information is required. Refer to Section 11.
- Attend and present any events at Internal Quarterly Review of AD Events.
- Attend and present any events at Quarterly Review of AD Events with EA.

8. Roles and Responsibilities POM & HSEQ

8.1. Principal Operations Manager

- Ensure training and competency of staff with roles linked to environmental permit.
- Monitor exceedances, abnormal operations, releases of biogas, or invalid readings – investigate where required.
- Report quarterly to Principal HSEQ Manager.
 - Summary of exceedance per line.
 - Summary of abnormal operations per line.

8.2. Principal HSEQ Compliance Manager or Delegate

- If exceedance, is identified by the Day STL submit a Schedule 5 – PART A to the EA within 24hrs of the event occurring.
- Set the event recorded in EcoOnline to investigation and delegate the Day STTL or AD Lead to carry out further investigation into the event.
- If / when all information is provided from the investigation, review and submit the Schedule 5 – PART B and submit it within 14 days of the event.
- Ensure that the EcoOnline submitted is correct and Update EcoOnline action with schedule 5 PARTA/B and close.
- Quarterly reporting to the EA.

- Annual reporting to the EA.
- Review the WID data taken directly from the CEMs system monthly to ensure all breaches are accounted for.
- Attend Monthly breach review with Account Director, Principal Operations Manager, Principal HSEQ Manager, Principal Commercial Manager, Environmental BP, HSEQ Advisor.
- Attend Internal Quarterly Review of AD Events.
- Attend Quarterly Review of AD Events with EA.

9. Process – Emissions to Air EfW

This process is applicable to all events - exceedances, abnormal operations, OTNOC, OO, and Invalids.

9.1

EfW Operator monitoring CEMs identifies exceedance, or invalid reading and flags this to the Duty STL following stabilising plant.

9.2

The EfW Operator begins an investigation into the cause of exceedance or invalid reading. Once information / evidence has been gathered this is to then be presented to the Duty STL.

9.3

The Duty STL is then to summarise the event on EcoOnline. Refer to Section 11.

9.4

If a maintenance issue has been identified as the cause of the exceedance or invalid reading, a work order should be raised in Pirana by the Duty STL or delegate EfW Operator.

9.5

The Duty STL should complete the Permit Compliance section of the STL Log with all information.

9.6

The Day STL will review the information provided by the Duty STL on the STL Log and EcoOnline and categorise the event into exceedance, OTNOC, abnormal operation or invalid. Refer to Section 3.2 for definitions.

9.7

The EcoOnline entry and STL Log will then be updated by the Day STL if more information is required and internal notification sent to relevant parties. Refer to Section 12.

9.8

The Duty STL will raise a Schedule 5 Part A and will send it to the HSEQ Team for review. Refer to AWRP-SW-EN-PR-016 Completing a Schedule 5 Procedure.

9.9

Schedule 5 Part A will be submitted to the EA within 24hrs of the event occurring by the Principle HSEQ Manager. Refer to Section 13.

9.10

The EcoOnline entry entered by the Duty STL will be triaged and once Schedule 5 Part A has been sent to the EA by the HSEA Team. The event will be set to investigation to be completed by the Day STL to compile Part B.

9.11

The Day STL will compile the Schedule 5 Part B and send it to the HSEQ Team for review. Refer to AWRP-SW-EN-PR-016 Completing a Schedule 5 Procedure.

9.12

Schedule 5 Part B will be submitted to the EA within 14 days of the event occurring by the Principle HSEQ Manager. Refer to Section 13.

9.13

The EcoOnline entry will then be updated, signed off, and closed out by the Principle HSEQ Manager or delegate and recorded/tracked accordingly. Refer to Section 14.

10. Process – Emissions to Air AD

This process is applicable to all exceedances (breaches and suspected abnormal operations) and invalid readings, including the release of biogas.

10.1

AD Operator (or delegate out of hours) monitoring CEMs and bag levels identifies exceedance, invalid reading or release of biogas makes record of the engine/flare fault code and flags this to the AD Lead, (or Duty STL outside of hours), following stabilising plant.

10.2

The AD Operator begins investigation into cause of exceedance, invalid reading or biogas release. Once information / evidence has been gathered this is to then be presented to the AD Lead and AD Technical Director.

10.3

The AD Lead or delegate out of hours is then to summarise the event on EcoOnline. Refer to Section 11.

10.4

The shift log is to be updated including the fault code identified, date and time of event, and

any further information.

10.5

If a maintenance issue has been identified as the cause of the exceedance or invalid reading, a work order should be raised in Pirana by the AD Lead or delegate AD Operator.

10.6

The AD Lead will send internal notification of the event to relevant parties. Refer to Section 12.

10.7

The AD Lead will raise a Schedule 5 Part A and will send it to the HSEQ Team for review. Refer to AWRP-SW-EN-PR-016 Completing a Schedule 5 Procedure.

10.8

Schedule 5 Part A will be submitted to the EA within 24hrs of the event occurring by the Principle HSEQ Manager. Refer to Section 13.

10.9

The EcoOnline entry entered by the AD Lead or delegate will be triaged and once Schedule 5 Part A has been sent to the EA by the HSEA Team. The event will be set to investigation to be completed by the AD Lead to compile Part B.

10.10

The AD Lead will compile the Schedule 5 Part B and send it to the HSEQ Team for review. Refer to AWRP-SW-EN-PR-016 Completing a Schedule 5 Procedure.

10.11

Schedule 5 Part B will be submitted to the EA within 14 days of the event occurring by the Principle HSEQ Manager. Refer to Section 13.

10.12

The EcoOnline entry will then be updated, signed off, and closed out by the Principle HSEQ Manager or delegate and recorded/tracked accordingly. Refer to Section 14.

11. EcoOnline

11.1. Event Entry

The Duty STL or AD Lead is to summarise all events in EcoOnline including the following:

- Evidence (trends / photographs etc.) of the event.
- Title of EcoOnline Entry should follow the sequence of:
 - EfW: XXXXXX (Date in reverse format) Potential Breach of EA Permit – EfW – Line – Parameter – Time frame of Event.
 - AD: XXXXXX (Date in reverse format) Potential Breach of EA Permit or Release of Biogas – AD – A4/5 OR Flare – Time Frame of Event.

- Date and Time of Event.
- Date and Time of Detection.
- Measured Value of Exceedance.
- Measures taken, or intended to be taken, to stop the emission.

11.2. Event Triage

The event can be triaged by a member of the HSEQ Team once the Schedule 5 Part A has been received, reviewed, signed, and submitted to the EA.

The date of submission is to be added to the triage for tracking.

11.3. Event Investigation

Once the investigation into the event has been finalised by the Day STL or AD Lead, the following further information is to be added to the EcoOnline entry:

- Any more accurate information on the matters outlined above.
- Measures taken, or intended to be taken, to prevent a recurrence of the event.

11.4. Event Sign Off

The event can be signed off by a member of the HSEQ Team once the Schedule 5 Part B has been received, reviewed, signed, and submitted to the EA.

The date of submission is to be added to the sign off for tracking.

12. Internal Notification

Notification of all events whether it be an exceedance, abnormal operation, invalid reading or release of biogas will be sent via email to the following:

- Account Director, Principal Operations Manager, Principal HSEQ Manager, and HSEQ Advisor.

Internal Notification should include the following:

- Title of the EcoOnline Entry (As outlined in Section 11).
- EcoOnline Reference Number.
- Date and Time of Event.
- Type of Event

13. EA Notification

All submissions to the EA should be sent to the following:

- To:
 - EA Officer
- CC:
 - Account Director, Principal Operations Manager, Principal HSEQ Manager, Principal Commercial Manager, Environmental BP, HSEQ Advisor, waste.ppp@northyorks.gov.uk

- None.

If it is predicted that there may be a delay in submitting the Part A to the EA, the Principle HSEQ Compliance Manager (or delegate) must contact the site EA officer and give reason for the delay with an estimated time for submission.

14. Recording of Events

The Duty STL is to complete the Permit Compliance section of the STL log and the Day STL to record the category of the event – exceedance, abnormal operation, OTNOC, OO or invalid reading.

The AD Lead or delegate out of hours is to complete the shift record adding details of any event. This includes the fault code identified, date and time of event, and any further information.

The Duty STL or AD Lead is to complete a record of the event on EcoOnline with the relevant information. The HSEQ team will upload a copy of the Schedule 5, if required, to SharePoint.

The Duty STL or AD Lead (or delegate operator) is to raise a Work Order if the cause of the event is determined to be related to a maintenance issue.

The HSEQ Schedule 5 Tracker is to be updated for all events – exceedances, abnormal operations, and invalids by the HSEQ Team.

The HSEQ Central Dashboard is to be updated by the HSEQ Team on SharePoint.

The Environmental Breach Register is to be updated by the HSEQ Team on SharePoint.

15. Associated Documents

Environmental Permit KP3808PN:

HSEQ > Environmental > Permits and Permissions.

AWRP-SW-EN-FO-006 EA Notification Template:

HSEQ > Environment > Environment Documents > EA Notification Template.

AWRP-SW-EN-RE-014 Environmental Breach Register Template:

HSEQ > Environment > Environment Documents > Environmental Breach Register Template.

AWRP-SW-EN-PR-015 Completion of a Schedule 5 Procedure:

HSEQ > Environment > Environment Documents > Completion of a Schedule 5 Procedure.

Environmental Breach Register 2025:

HSEQ > Environment > Environment Records > Environmental Breach Register 2025.

HSEQ Central Dashboard:

HSEQ (Central) > HSEQ General > Environmental Dashboards.