

Permitting Decisions- Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Unit 4a operated by Aqua Force Special Waste Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/XP3992FV/V010.

Permit Review

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), regulation 34(1), to periodically review permits. Article 21(3) of the Industrial Emissions Directive (IED) also requires the Environment Agency to review conditions in permits to ensure that they deliver compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for this regulated facility and varied the permit to make a number of changes to reflect relevant standards and best practice. These changes principally relate to the implementation of our technical guidance for WEEE treatment and transfer, and Waste Temperature Exchange Equipment including the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.

In this decision document, we set out the reasoning for the variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator in the operation and control of the plant and activities of the installation (operating techniques) against our technical guidance.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

Purpose of this document

This decision document provides a record of the decision making process. It:

- explains how the Environment Agency initiated variation has been determined;
- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account;
- highlights key issues in the determination.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

Environment Agency led variation – permit review

We have carried out an Environment Agency initiated variation to the permit following a permit review as required by legislation to ensure that permit conditions deliver compliance with relevant legislative requirements and appropriate standards to protect the environment and human health.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018. Relevant existing facilities were expected to be in compliance with the BAT Conclusions within 4 years (i.e. by August 2022).

On 13th July 2022 our WEEE (waste electrical and electronic equipment) appropriate measures guidance was published on gov.uk. This guidance includes additional appropriate measures for WTEE (waste temperature exchange equipment).

This technical guidance explains the standards (appropriate measures) that are relevant to regulated facilities with an environmental permit to treat or transfer

WEEE (including WTEE) and incorporates the relevant requirements of the BAT Conclusions.

The following Appropriate Measures guidance is also applicable to the permitted activities being varied under this permit review and has been included in the operating techniques table.

Chemical waste: appropriate measures for permitted facilities – published 18 November 2020.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 20/04/2022 requiring the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards (appropriate measures) described in our technical guidance.

The notice required that where the revised standards are not currently met, the operator should provide information that:

- Describes the techniques that will be implemented to ensure operations meet the relevant standards and by when, or
- Explains why they are not applicable to the facility in question, or
- Justifies why an alternative technique is appropriate and will achieve an equivalent level of environmental protection to the standards described in our guidance

The standards described in our technical guidance are split into 7 chapters:

- General management appropriate measures
- Waste pre-acceptance, acceptance and tracking appropriate measures
- Waste storage, segregation and handling appropriate measures
- Waste treatment appropriate measures
- Emissions control appropriate measures
- Emissions monitoring and limits appropriate measures
- Process efficiency appropriate measures

The WTEE appropriate measures guidance, which supplements the WEEE technical guidance, includes an additional chapter on Process monitoring.

We have set emission limit values (ELVs) and monitoring requirements for relevant substances in line with our technical guidance and the BAT Conclusions for Waste Treatment, unless a tighter, i.e. more stringent, limit was previously imposed and these limits have been carried forward.

The Regulation 61 notice required the operator to confirm whether they could comply the standards described in each of these chapters. Table 1 below provides a summary of the response received and our assessment of it. The

overall status of compliance with the standards (appropriate measures) is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

FC – Compliant in the future (through improvement conditions set in permit)

NC – Not Compliant

In accordance with Article 22(2) of the Industrial Emissions Directive, the Regulation 61 notice asked the operator to provide a soil and groundwater risk assessment, along with a baseline report or summary report confirming the current state of soil and groundwater contamination, where listed activities are undertaken that involve the use, production or release of relevant hazardous substances.

The Regulation 61 notice also asked the operator to confirm whether they operate a medium combustion plant or specified generator (as per Schedule 25A or 25B of EPR 2016) and whether they had considered how their operations could be affected by climate changes (e.g. through a climate change adaptation plan).

Our assessment of the responses received from the operator regarding soil and groundwater risk assessment, medium combustion plant and specified generators, and consideration of climate change are also summarised in Table 1.

The Regulation 61 notice response from the Operator was received on 08/12/2023, with an updated response provided on 03/04/2024.

Although we were able to consider the Regulation 61 notice response generally satisfactory at receipt, we needed more information in order to complete our permit review assessment. We requested this by email and the operator provided further information:

03/04/2024 – operator provided updated Regulation 61 Notice that removed references to the future variation the operator has applied for. This included both a chemical waste and WEEE waste Regulation 61 Notice response. The operator also provided their storage and tonnage limits for each activity on site. The operator also provided confirmation that no crushing treatment of gas discharge lamps occurs on site.

26/04/2024 – operator provided a list of EWC waste codes that were accepted for the AR4 repackaging activity, details of the process of repackaging and bulking, maximum storage capacity of GDL, CRT and FPD, and description of repackaging and bulking activity

Table 1 – Summary of our assessment of the operator’s Reg 61 response

Appropriate measures	Compliance status	Assessment of the installation’s compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
<p>General management appropriate measures</p>	<p>FC</p>	<p>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2, by adding reference to the relevant Appropriate Measures for the site operations:</p> <ul style="list-style-type: none"> • Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities • Waste temperature exchange equipment: appropriate measures for permitted facilities • Chemical Waste: appropriate measures for permitted facilities <p>The operator confirmed that they currently meet the requirements of all appropriate measures in this section, except for the provision of an Accident Management Plan, Accident Prevention Measures, and Plant Decommissioning Plan. The operator is currently in the process of a variation the expand operations on site. As part of the variation, these management plans will be updated and included for approval. In the scenario where the operator-led variation is not issued, dischargeable improvement conditions (IC7, IC8, and IC9) have been included within the permit.</p> <p>An Improvement Condition (IC10) has also been introduced to the permit for the operator to provide a revised FPP which updates the old plan to the requirements of the relevant appropriate measures and Fire Prevention guidance, see Improvement Programme section of this document.</p>
<p>Waste pre-acceptance, acceptance and tracking appropriate measures</p>	<p>CC</p>	<p>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2, by adding reference to the relevant Appropriate Measures for the site operations:</p> <ul style="list-style-type: none"> • Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities • Waste temperature exchange equipment: appropriate measures for permitted facilities <p>Chemical Waste: appropriate measures for permitted facilities</p>
<p>Waste storage, segregation and handling appropriate measures</p>	<p>CC</p>	<p>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2, by adding reference to the relevant Appropriate Measures for the site operations:</p> <ul style="list-style-type: none"> • Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities • Waste temperature exchange equipment: appropriate measures for permitted facilities

		<ul style="list-style-type: none"> • <i>Chemical Waste: appropriate measures for permitted facilities</i>
Waste treatment appropriate measures	FC	<p><i>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2, by adding reference to the relevant Appropriate Measures for the site operations:</i></p> <ul style="list-style-type: none"> • <i>Chemical Waste: appropriate measures for permitted facilities</i> • <i>Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities</i> • <i>Waste temperature exchange equipment: appropriate measures for permitted facilities</i> <p><i>An improvement condition (IC11) has been introduced to the permit for the operator to provide compliance with Section 5.3 and 5.4 of the Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities, see Improvement Programme section of this document.</i></p>
Emissions control appropriate measures	CC	<p><i>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2, by adding reference to the relevant Appropriate Measures for the site operations:</i></p> <ul style="list-style-type: none"> • <i>Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities</i> • <i>Waste temperature exchange equipment: appropriate measures for permitted facilities</i> <p><i>Chemical Waste: appropriate measures for permitted facilities</i></p>
Emissions monitoring and limits appropriate measures	FC	<p><i>The operator confirmed that they currently meet the requirements of all appropriate measures in this section with the exception of one requirement:</i></p> <ul style="list-style-type: none"> • <i>Section 7.1 of the WTEE appropriate measures</i> <p><i>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</i></p> <ul style="list-style-type: none"> • <i>Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities</i> • <i>Waste temperature exchange equipment: appropriate measures for permitted facilities</i> • <i>Chemical Waste: appropriate measures for permitted facilities</i> <p><i>Improvement Conditions have also been introduced to the permit which require the operator to assess the WTEE plant (Emission Point A1) and aerosol/paint processing plant (Emissions Point A2) point source emissions to air and complete an H1 Environmental Risk Assessment (IC4), and undertake a programme of fugitive emissions monitoring to</i></p>

		<p><i>demonstrate that the full WTEE treatment process does not give rise to fugitive releases of refrigerant or blowing agent gases), and to speciate volatile organic compounds for the aerosol/paint processing plant, see Improvement Programme sections of this document.</i></p> <p><i>Improvement Conditions have also been introduced to the permit to quantify and assess the risk associated with emissions from the repackaging of liquid-based waste (IC5). This is linked to IC6 which requires the operator to review the risk of fugitive emissions by undertaking representative monitoring, assessing the impact of those emissions through a H1 risk assessment, and propose appropriate mitigation measures where the assessment determines they are significant.</i></p>
Process efficiency appropriate measures	FC	<p><i>The operator confirmed that they currently meet the requirements of all appropriate measures in this section with the exception of one requirement:</i></p> <ul style="list-style-type: none"> <i>• Section 8.1 of WEEE and Chemical waste appropriate measures</i> <p><i>Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</i></p> <ul style="list-style-type: none"> <i>• Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities</i> <i>• Chemical Waste: appropriate measures for permitted facilities</i> <p><i>An improvement condition (IC7) has been introduced to the permit which requires the operator to create and implement an energy efficiency plan in order to provide compliance with Measure 8.1 of both appropriate measures.</i></p>
Process monitoring appropriate measures	CC	<p><i>The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2 i.e. the WTEE Appropriate Measures.</i></p> <p><i>This will also be subject to and assessed by the annual performance testing required within the permit, as defined by the WTEE Appropriate Measures introduced through the permit review.</i></p>
Reg 61 requirement Assessment of response received		
Soil and groundwater risk assessment		<i>The operator has submitted a Site Condition Report (Ref: CE-FA-1921-RP04-SCR-Final) and a H1 Accidents and Amenities Risk Assessment (Ref: CE-FA-1921-RP02) which sets out consideration to the risk to the soil and groundwater.</i>
Medium combustion plant		<i>The operator declared that there is a steam boiler on site which provides electrical power to the WTEE treatment but, and steam stripping of the</i>

and specified generators	<i>charcoal absorbers. This has been confirmed that the capacity of the plant is <1MWh and therefore is below the MCP threshold.</i>
Climate change	<i>Climate change assessment provided but not assessed. The operator has not entered into a climate change agreement with the Government.</i>
Summary of other changes made to the permit as a result of our assessment of the Reg 61 response	
Inclusion of EWC code 20 01 37*	<i>Email correspondence from the operator highlighted that the EWC code (20 01 37* (Wood containing dangerous substances)) was not transferred from a previous version of the permit when a variation dated 28/07/2009 was issued. This has been re-applied to the operator's permit.</i>
Additional waste code table for repackaging activity (S2.9)	<i>We have included an additional waste code table using existing EWC waste codes in the permit that were destined for the repackaging activity (AR4) in order to clarify within the permit which waste codes applied to the activity.</i>
Removal of A10	<i>We have removed the following DAA from the permit "Storage of processed materials, excluding temporary storage of hazardous waste under Section 5.6 (A)(1)(a)".</i> <i>The storage of treated/processed waste is now included within the specific limits of the relevant installation activities.</i>

Decision Considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the Regulation 61 notice response that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

The regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation', and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The site

The operator has provided a plan which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points.

The plans show the location of the part of the installation to which this permit applies on that site.

The plan is included in the permit.

Operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in S1.2 in the environmental permit.

Changes to the permit conditions

We have varied the permit as stated in the variation notice.

Improvement programme

We have included an improvement programme requiring the operator to:

- IC4: Undertake and submit an assessment of the existing WTEE treatment line and aerosol destruction plant point source emissions to air (IC4), which also requires the operator to submit an H1 environmental risk assessment based on the results of the assessment and propose and implement mitigation if required.
- IC5: The Appropriate Measures (Section 4, Point 86) require that repackaging is undertaken with Local Exhaust Ventilation (LEV) with abatement or equivalent to address the risk of diffuse emissions to air from the activity.
The operator has not provided evidence that adequately demonstrates that abatement is not required for their activity, based on the risks posed.

We have therefore included an improvement condition that requires that the risk of diffuse emissions to air from activity AR4 are assessed and, unless the risk is demonstrated to be insignificant, Local Exhaust Ventilation (LEV) with abatement or equivalent is implemented.

- IC 6: The operator must undertake and submit an energy efficiency plan and energy balance record in line with BAT conclusion 23 and the relevant appropriate measures. The operator has stated that this will be completed as part of an ongoing permit variation. This improvement condition has been included in the scenario where the operator-led variation is not issued.
- IC 7: The operator must undertake and submit a residue management plan and submit an accident management plan in line with BAT conclusion 1 and the relevant appropriate measures. The operator has stated that this will be completed as part of an ongoing permit variation. This improvement condition has been included in the scenario where the operator-led variation is not issued.
- IC 8: The operator must submit a plant decommissioning plan in line with the relevant appropriate measures. The operator has stated that this will be completed as part of an ongoing permit variation. This improvement condition has been included in the scenario where the operator-led variation is not issued.
- IC 9: The operator must submit an updated fire prevention plan in line with the fire prevention plan guidance. The operator has stated that this will be updated as part of an ongoing permit variation. This improvement

condition has been included in the scenario where the operator-led variation is not issued.

- IC 10: The operator must update their waste treatment procedures to comply with Measure 5.3 and 5.4 of the Waste electrical and electronic equipment (WEEE): appropriate measures.
- IC 11: The operator must carry out a review of their current measures in place to prevent or minimise the emissions to air from the airbag treatment process (AR6).
- IC12: The operator must submit a programme that samples and characterises the waste outputs and residues as a result of the airbag treatment process to ensure they are correctly classified and coded.

The operator has responded to the Regulation 61 Notice to state that the detail on the handling of plastics containing POPs will be progressed as part of the permit variation process, as well as the process monitoring procedures. This improvement condition has been included in the scenario where the operator-led variation is not issued.

Changes to EWC codes

We have agreed to include into the permit the following waste code:

- 20 01 37* (Wood containing dangerous substances)

This waste code was present in the waste management licence (EAWML 40075) issued on the 04/09/2014. However, this waste code was removed without justification as a result of the variation that implemented the changes brought about by the Industrial Emissions Directive (IED) for “existing facilities operating newly prescribed activities”, varying the facility from a waste operation to an IED installation.

Therefore, we have amended this incorrection and incorporated the EWC waste code back into the permit under Table S2.6, permitted waste types for other hazardous waste storage and transfer only.

Emission limits

Emission Limit Values (ELV's) based on Best Available Techniques Achievable Emission Levels (BAT-AELS) for Waste Treatment, have been added or amended for the following substances:

Emission point A1

- Dust – amended to 5mg/m³
- CFCs – 10 mg/m³
- Total VOCs (concentration) – 15 mg/m³
- Total VOCs (mass emission) – Mass loss limit, set on a pro-rate basis, based upon a mass limit of 5g per 100 units treated per hour
- Air flow – no limit set
- Brominated flame retardants – no limit set
- Dioxin-like polychlorinated biphenyls (PCBs) – no limit set
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V) – no limit set
- Dioxins and furans (PCDD/F) – no limit set

Emission point A2

- Dust – 5mg/m³
- TVOC – 30mg/m³

These limits were derived from:

- The BAT Conclusions for waste treatment, August 2018 under Directive 2010/75/EU
- Environment Agency guidance ‘Waste electrical and electronic equipment (WEEE): appropriate measures’
- Environment Agency guidance ‘Waste temperature exchange equipment: appropriate measures’

Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:

Process monitoring (Table S3.4):

- Stage 1 degassing: Refrigerant recovery, based upon mass balance calculation
- Stage 2 destruction: Blowing agent recovered as a percentage of the theoretical content of the waste treated
- All mechanical treatment of WEEE: Mass balance

These monitoring requirements have been included in order to ensure that the abatement is operating correctly and ensure that the monitoring is in line with our guidance.

We made these decisions in accordance with:

- Environment Agency guidance 'Waste electrical and electronic equipment (WEEE): appropriate measures'
- Environment Agency guidance 'Waste temperature exchange equipment: appropriate measures'
- The BAT Conclusions for waste treatment, August 2018 under Directive 2010/75/EU

Reporting

We have added reporting in the permit for the following parameters:

- Dust
- Brominated flame retardants
- Dioxin-like polychlorinated biphenyls (PCBs)
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V)
- CFCs
- Total VOCs (Emission Point A1 and A2)
- Total VOCs (concentration)
- Total VOCs (Mass emission)
- Air flow

We made these decisions in accordance with Best Available Techniques for Waste Treatment

Growth Duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 100 of that Act in deciding whether to grant the variation of this permit.

Paragraph 1.3 of the guidance says:

"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.