

Natural Resources Wales permitting decisions

Variation and Consolidation of a bespoke Permit – Western Power Distribution (South Wales) Plc

We have decided to issue a Natural Resources Wales initiated variation and consolidated permit for Ty Coch Depot on Ty Coch Way in Ty Coch, Cwmbran, NP44 7EZ operated by Western Power Distribution (South Wales) Plc.

The permit number is EPR/AB3091FW.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

The permit has been varied following the publication of the revised Best Available Techniques (BAT) Reference Documents (BREF) for Waste Treatment. The associated BAT conclusions to this document were published on 17 August 2018 in the Official Journal of the European Union.

This variation incorporates the changes required by the Industrial Emissions Directive following a statutory review of permits in the Waste Treatment sector. These include the amendment of the wording of several permit conditions relating to notifications, changes to emissions limits and monitoring requirements.

We are satisfied that the operator will be compliant with the published BAT conclusions which will apply from 17 August 2022.

Purpose of this document

This decision document:

- explains how we have carried out our statutory review of the Operator's Permit;
- why we have decided to vary the Permit as a result of that review; and
- why we have included the specific conditions in the revised Permit through the variation notice we are issuing.

It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position.

Structure of this document

- Assessment of Ty Coch Depot against the published BAT conclusions for Waste Treatment.
- Annex 1 – Decision Checklist regarding relevant BAT Conclusions.

Assessment of Ty Coch Depot against the published BAT conclusions for Waste Treatment

1. Our decision

We have issued a variation, which will allow Western Power Distribution (South Wales) Plc to operate the installation, subject to the conditions in the varied permit.

The variation does three things:

- it consolidates the original permit to reflect changes made through earlier variations;
- it brings the permit into line with our modern regulatory template; and

- it varies the permit where appropriate to reflect the outcome of our statutory review and incorporate Best Available Techniques (BAT) and Associated Emission Limit Values (BAT-AELs).

We consider that, in reaching this decision, we have taken into account all relevant considerations and legal requirements and that the permit will continue to ensure that a high level of protection is provided for the environment and human health.

The original permit, issued on the 15 December 2015, ensured that the installation, employed Best Available Techniques (BAT) and ensured a high level of protection for human health and the environment. We have altered the permit as a result of the statutory review, and we are confident that the new requirements will deliver a superior level of protection to that which was previously achieved. Where a site is not currently compliant with BAT, Improvement Conditions have been included to bring the site up standard by 17 August 2022.

2. The legal framework

The Variation and Consolidation Notice (which includes the consolidated permit as Schedule 2) will be issued under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 (EPR). The environmental permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the Industrial Emissions Directive (IED);
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Variation and Consolidated Permit, it will ensure that the operation of the installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

3. How we reached our decision

Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 on 04 April 2019 requiring the operator to provide information to demonstrate how the operation of their installation currently meets, or will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Regulation 61(1) Notice required the operator to:

- Describe the techniques that will be implemented before 17 August 2022, which will then ensure that operations meet the revised standard, or
- Justify why standards will not be met by 17 August 2022, and confirmation of the date when the operation of those processes will cease within the installation or an explanation of why the revised BAT standard is not applicable to those processes, or
- Justify why an alternative technique will achieve the same level of environmental protection equivalent to the revised standard described in the BAT Conclusions.
- Where their permitted activity involves the use, production or release of a hazardous substance, as defined in Article 3(18) of the Industrial Emissions Directive, Western Power Distribution (South Wales) Plc were required to carry out a risk assessment considering the possibility of soil and groundwater contamination at the permitted installation with such substances. Where risk of such contamination is established prepare a baseline report containing information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definite cessation of the activity. Western Power Distribution (South Wales) Plc have a copy of a consequent baseline report.
- Where their permitted activity involves the use, production, storage or release of priority hazardous substances and any other relevant substances, as defined by

the Water Framework Directive, the Western Power Distribution (South Wales) Plc were required to carry out a risk screening assessment considering the presence of priority hazardous substances at the permitted installation. Where a risk of these substances is established the operator is to sample the effluent and screen for the priority hazardous substances. If these substances are found to be present in the effluent stream, then assessment using the H1 tool and potential detailed modelling will be required to demonstrate that the effluent discharge will not have a significant impact to the receiving water.

Where the operator proposed that they were not intending to meet a BAT standard, that also included a BAT Associated Emission Level (BAT-AEL) described in the Waste Treatment BAT Conclusions Document, the Regulation 61(1) Notice requested that the operator make a formal request for derogation from compliance with that AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request. The operator did not apply for any derogations.

The Regulation 61(1) Notice response from the operator was received on the 24 September 2019 and additional information received on the 22 July 2020.

We considered that the response contained sufficient information for us to commence determination of the permit review. The operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 61(1) Notice response that appears to be confidential in relation to any part.

4. Key issues/Regulation 61 response

BAT Conclusions for the Waste Treatment were published as Commission Implementing Decision EU 2018/1447 in the Official Journal of the EU on 17 August 2018. There are 53 BAT Conclusions. Annex 1 provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This should be read in conjunction with the permit/variation notice issued.

In response to Sections 1 to 4 of the Regulation 61 Notice a detailed response was received from Western Power Distribution (South Wales) Plc. Following assessment of the Regulation 61(1) response, further information was requested from Western Power Distribution (South Wales) Plc. Where the operator has concluded that they have achieved BAT, and we are in agreement, no further information/justification has been sought by Natural Resources Wales (NRW). Where NRW are not in agreement, or where insufficient information has been provided a series of Improvement Conditions have been included in the permit.

In response to Section 5 of the Regulation 61 Notice an update OPRA profile was provided. The Opra score remains 36.

In response to Section 6 of the Regulation 61 Notice, the Operator confirmed that site activities do not involve the use, production or release of relevant hazardous substances (as defined in Article 3(18) of the Industrial Emissions Directive) however they do store hazardous substances on site. Although the operator did not provide a copy of any baseline site condition reports as part of their response to the Reg 61 (1) notice, the operator did submit a site condition report in support of the original application (documents dated 2nd July 2015), which satisfies this requirement.

In response to Section 7 of the Regulation 61 Notice, the Operator confirmed that there are no discharges to surface water or sewer other than clean surface water run-off from the oil storage bunds.

5. Changes we have made

Improvement Conditions

Based on the information provided in the Regulation 61(1) response, we consider that we need to set improvement conditions. These conditions are set out below. We are using these conditions to require the operator to provide Natural Resources Wales with details that need to be established or confirmed during operations. The improvement conditions ensure compliance by 2022.

Reference	Requirement	Date
IC1	The operator shall submit to Natural Resources Wales for written approval, information to evidence compliance with the following BAT Conclusions, in accordance with requirements specified within the Waste Treatment BREF Document (EU 2018). BAT 1 - Implement and adhere to an environmental management system (EMS) that incorporates all of the following features: • (VIII) Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life; • (XII) Residues Management Plan.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC2	The operator shall submit to Natural Resources Wales for written approval, information to evidence compliance with the following BAT Conclusions in accordance with requirements specified within the Waste Treatment BREF Document (EU 2018): • BAT 23 Energy Efficiency Plan.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC3	The operator shall submit to Natural Resources Wales for approval an updated Site Boundary and Layout Plan clearly showing all points source emissions from the site.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales

IC1 – The Operator has not provided sufficient information to demonstrate full compliance with BAT Conclusion 1.

- With reference to BAT1(VIII), the Operator has stated that the only plant / equipment associated with the storage and draining of oil is the bunded storage

units, which comply with the Control of Pollution (Oil Storage) Regulations (Wales) 2016. Although the Operator does not envisage the bunded storage infrastructure ever being required to be decommissioned, the need for consideration of whole life cycle and eventual impact from decommissioning is a requirement for all permitted sites, as any permit may eventually be surrendered with appropriate decommissioning required.

- With reference to BAT1(XII), the Operator has stated within their response that there are no residues generated from the storage and drainage of used electrical oil. However, within their response provided against BAT Conclusion 24, the Operator advised that the site does generate some waste residues (including drums, containers, IBCs, pallets, etc), but where the containers remain in good working order and when appropriate compatibility of substances, these containers are reused. The Operator has not provided sufficient evidence to demonstrate that a Residues Management Plan which meets the requirements described within Section 6.5 of the BAT Conclusions document is in place.

IC2 – The Operator has not provided sufficient information to demonstrate full compliance with BAT Conclusion 23. Within their response the Operator has stated that the site does not have an Energy Efficiency Plan in place, as these BAT conclusions are not relevant. As this is a general BAT conclusion, the requirement is applicable to all waste treatment installation sites. The facility uses electricity and thus should monitor energy consumption in accordance with BAT.

IC3 – Although the site does not have any point source emissions to air, land, or any point source emissions to surface water or sewer from process effluent, the site does discharge clean surface water run-off from storage bunds. The site plan contained within Schedule 7 of the permit does not currently identify this discharge point.

Reporting and Operational Changes

Additional process data to report against generation of residues and wastewater has been included as part of the updated reporting parameters and forms detailed within Schedule 4 of the permit, in order to satisfy requirements of BAT Conclusion 11. This reflects the modern permit template as well as ensures the site is compliant with BAT Conclusion 11 from the effective compliance date of 17 August 2022.

The site boundary line shown on the plan within Schedule 7 has been edited to green to correlate with Condition 2.2.1.

There have been no other operational changes incorporated into this permit variation.

Emissions to Water

As part of our delivery of the Water Framework Directive requirements, we need to identify and assess the impact for all discharges to surface waters and/or sewer from the site for priority hazardous substances and any other relevant substances. The emissions monitoring for these substances should be carried out using the methods and standards described in the M18 guidance on “Monitoring of discharges to water and sewer”.

With reference to the risk assessment guidance on the gov.uk website entitled “Surface water pollution risk assessment for your environmental permit” (accessible via: <https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit>) the company carried out the following assessments:

- Screening tests for priority hazardous pollutants and any other relevant priority hazardous substances.
- For any substance which is not screened out by the screening tests further modelling, as described in the risk assessment guidance “Surface water pollution risk assessment for your environmental permit”.

Although site activities include the storage of hazardous substances, the Operator has not undertaken an assessment of the impact from the site as there are no emissions to water associated with the permitted activities.

Emissions to Water – Article 15(4) Derogations

No derogations.

Emissions to Air

There are no emissions to air associated with the permitted activity.

Emissions to Air – Article 15(4) Derogations

No derogations

Other IED BREFs relevant to the permit review

There are no specific listed activities within Table S1.1 of the permit that are within scope of other published BREFs.

6. Conclusion

We consider that the installation already employed what used to be BAT, at the time the permit was originally granted. The revised BREF provides the opportunity to consider further environmental improvements.

Coupled with the consolidation and modernisation of the permit, we believe this variation provides a sound basis for ongoing regulation of the installation and we are satisfied that the operator is currently achieving or will be achieving all relevant BAT by 17 August 2022.

We believe that we have ensured compliance with all relevant legal requirements in carrying out this review and making our determination on the variation.

Annex 1: Decision checklist regarding relevant BAT Conclusions

BAT Conclusions for the Waste Treatment BREF were published as Commission Implementing Decision EU 2018/1147 in the Official Journal of the EU on 17 August 2018. There are 53 BAT Conclusions. This checklist provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This Annex should be read in conjunction with the consolidated variation notice.

All BAT Conclusions arising are listed by number in order below;

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
OVERALL ENVIRONMENTAL PERFORMANCE		
1	Environment Management System (EMS) – <u>ALL</u> of the following:	
	I. Management commitment	Currently Compliant: Site operates under an Environmental Management Systems (EMS) which has been agreed with NRW. The EMS is also certified to ISO14001:2015 standards. Approval number: 116886/10. Re-Issue Date: 18 March 2019; Expiry Date: 2 June 2020. The requirements of ISO14001:2015 includes evidence of management commitment.

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	II.	Environmental policy development including CI of performance	Currently Compliant: Implemented through site Management System Document Reference: WPD Environmental Policy and Ty Coch Environmental Management Plan (EMP)
	III.	Planning and implementing procedures & targets in conjunction with financial planning & investment	Currently Compliant: Implemented through site Management System Document Reference: WPD ST EN1 (Relating to Company Environmental Goals and Targets) and Ty Coch Environmental Management Plan (EMP) (EMP)
	IV.	Implementation of procedures	
		(a) Structure & responsibility	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(b) Recruitment, training, awareness & competence	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(c) Communication	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(d) Employee involvement	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(e) Documentation	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(f) Effective process control	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		(g) Maintenance programmes	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(h) Emergency preparedness & response	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
		(i) Safeguarding compliance with environmental legislation	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch Environmental Management Plan (EMP) and WPD ST EN8 -EMS Implementation
	V.	<i>Checking performance and taking corrective action</i>	
		(a) Monitoring & measurement	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch ISO14001 June 2020 certificate plus Ty Coch EMP and WPD ST EN8 -EMS Implementation
		(b) Corrective and preventive action	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch ISO14001 June 2020 certificate plus Ty Coch EMP and WPD ST EN8 -EMS Implementation
		(c) Maintenance of records	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch ISO14001 June 2020 certificate plus Ty Coch EMP and WPD ST EN8 -EMS Implementation
		(d) Independent (where practicable) internal or external EMS auditing	Currently Compliant: Implemented through site Management System Document Reference: Ty Coch ISO14001 June 2020 certificate plus Ty Coch EMP and WPD ST EN8 -EMS Implementation
	VI.	Senior management review of EMS	Currently Compliant: Implemented through site Management System Document Reference: 2019 Environmental Management Review document

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	VII.	Following development of cleaner technologies	Not Applicable: Implemented through site Management System No treatment process taking place, no clean technology associated with storage and draining of oil
	VIII.	Whole life cycle considerations when designing a new plant i.e. impacts from eventual decommissioning and throughout its operating life	Compliance in Future: Operator has stated only plant associated with storage and draining of oil is the bunded storage which currently, and in the future will comply with the Control of Pollution (Oil Storage) Regulations (Wales) 2016. Operator does not envisage bunded storage being decommissioned, however this is a requirement for all permitted sites, as any permit may eventually be surrendered with decommissioning required for the site. An improvement condition has been included within the permit to ensure that the site is compliant with the BAT requirement prior to compliance deadline (IC1)
	IX.	Regular sectoral bench marking	Currently Compliant: The only sectoral benchmarking undertaken is against other UK Distribution Network Operators, as required by Ofgem. Site does not operate in the waste management sector.
	X.	Waste stream management (BAT 2)	Currently Compliant: Any waste oil identified as containing in excess of 50ppm of PCB is segregated and stored separately prior to onward collection as hazardous waste by a third party. All other WPD waste entering the site, for example, scrap metal / cardboard is segregated upon arrival prior to collection by authorised waste contractor (Veolia / Celtic Recycling).
	XI.	Inventory of wastewater & waste gas streams (BAT 3)	Not applicable No process wastewater or gas streams generated on site
	XII.	Residues Management Plan – S6.5	Compliance in Future Operator has stated no residues are generated from the storage and drainage of used electrical oil, however as detailed within above response to BAT1(X) the site does generate some waste residues (scrap metal / cardboard etc). An improvement condition has

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			been included within the permit to ensure that the site is compliant with the BAT requirement prior to compliance deadline (IC1)
	XIII.	Accident Management Plan – S6.5	Currently Compliant: Implemented through WPD HS 5A – Investigation of Serious Accidents, Major Operational Incidents and Significant Plant Failures by a Panel of Enquiry and WPD HS 5B Reporting and Investigation of Accidents, Incidents and Industrial Diseases
	XIV.	Odour Management Plan (BAT 12)	Not Applicable Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
	XV.	Noise & Vibration Management Plan (BAT 17)	Not applicable Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
2	Improving overall environmental performance – <u>ALL</u> of the following:		
	a.	Set up and implement waste characterisation & pre-acceptance procedures	Currently Compliant Implemented through site Management System Document Reference: Standard Technique STEN3E and STEN3F (App 3 & 4) The permitted waste entering Ty Coch is only ever used electrical insulating oil from WPD operational sites. We understand the nature of the waste and there is no variation in its physical or chemical properties.
	b.	Set up and implement waste acceptance procedures	Currently Compliant Implemented through site Management System Document Reference: Standard Technique STEN3E and STEN3F (App 3 & 4)
	c.	Set up and implement a waste tracking system & inventory	Currently Compliant Implemented through site Management System. NB. There are no previous waste holders. Document Reference: Standard Technique STEN3E and STEN3F (App 3 & 4) Also see Ty Coch waste oil inventory.
	d.	Set up and implement an output quality management system	Currently Compliant Implemented through site Management System Document Reference: Standard Technique STEN3E and STEN3F (App 3 & 4)

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			4) There is no waste treatment taking place and no associated performance or quality measures to monitor. Used electrical insulating oil is drained and stored for onward collection by a third party.
	e.	Ensure waste segregation	Currently Compliant Implemented through site Management System Document Reference: company policy EN POL3 (App 2) Any waste oil identified as containing in excess of 50ppm of PCB is segregated and stored separately prior to onward collection as hazardous waste by a third party. All other waste entering the site (WPD only), for example, scrap metal / cardboard is visually assessed and segregated upon arrival prior to collection by authorised waste contractor (Veolia / Celtic Recycling).
	f.	Ensure waste compatibility prior to mixing or blending	Not applicable: No Operator has stated N/a. No mixing or blending of waste is taking place only bulking up oil.
	g.	Sort solid incoming waste – S6.4	Currently Compliant: Operator has stated site receives solid wastes in the form of wet transformers and pole mounted transformers. All incoming solid waste (WPD only) is visually assessed and segregated upon arrival prior to collection by authorised waste contractor (Veolia / Celtic Recycling). Oil filled transformers are assessed and either collected wet by Celtic Recycling or taken to the onsite workshop for drainage.
3	Establish and maintain a wastewater and waste gas inventory as part of the EMS - <u>ALL</u> of the following:		
	<i>Information on characteristics of waste and waste treatment processes</i>		
	(i)(a)	simplified process flow sheets showing emission sources	Not applicable: No process wastewater or gas streams generated on site
	(i)(b)	Process-integrated and wastewater/waste gas treatment descriptions including performance	Not applicable: No process wastewater or gas streams generated on site
	<i>Information on characteristics of wastewater streams</i>		

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	(ii)(a)	Mean and variability of:	
		Flow	Not applicable: No process wastewater streams generated on site
		pH	Not applicable: No process wastewater streams generated on site
		Temperature	Not applicable: No process wastewater streams generated on site
		Conductivity	Not applicable: No process wastewater streams generated on site
	(ii)(b)	Mean concentration, load and variability of:	
		Total suspended solids	Not applicable: No process wastewater streams generated on site
		COD/TOC	Not applicable: No process wastewater streams generated on site
		Nitrogen species	Not applicable: No process wastewater streams generated on site
		Phosphorous	Not applicable: No process wastewater streams generated on site
		Metals	Not applicable: No process wastewater streams generated on site
		Priority substances/micropollutants	Not applicable: No process wastewater streams generated on site
		Any other relevant compounds	Not applicable: No process wastewater streams generated on site
	(ii)(c)	Bioeliminability data (see BAT 52):	
		BOD	Not applicable: No process wastewater streams generated on site
		BOD to COD ratio	Not applicable: No process wastewater streams generated on site
		Zahn-Wellens test	Not applicable: No process wastewater streams generated on site
		Biological inhibition potential	Not applicable: No process wastewater streams generated on site
	Information on characteristics of waste gas streams		
	(iii)(a)	Mean and variability of:	
Flow		Not applicable No waste gas streams generated on site	
temperature		Not applicable No waste gas streams generated on site	

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	(iii)(b)	<i>Mean concentration, load and variability of relevant substances:</i>	
		Organic compounds	Not applicable No waste gas streams generated on site
		POPs e.g. PCBs	Not applicable No waste gas streams generated on site
		Any other relevant compounds	Not applicable No waste gas streams generated on site
	(iii)(c)	Flammability	Not applicable No waste gas streams generated on site
		Lower and Higher Explosive Limits	Not applicable No waste gas streams generated on site
		Reactivity	Not applicable No waste gas streams generated on site
	(iii)(d)	<i>Presence of other substances that may affect the gas treatment system or plant safety:</i>	
		O2	Not applicable No waste gas streams generated on site
		N2	Not applicable No waste gas streams generated on site
		Water vapour	Not applicable No waste gas streams generated on site
		Dust	Not applicable No waste gas streams generated on site
4	Reducing environmental risk associated with waste storage – <u>ALL</u> of the following:		
	a.	Optimised storage location	Currently Compliant: Operator has confirmed drums of used electrical insulation and heat transmission oils are stored in dedicated oil storage tank and rhinobund
	b.	Adequate storage capacity	Currently Compliant: Operator has confirmed entire site is bunded and serviced with impermeable surface. Site is also serviced with class 1 oil interceptor to separate oil and grease from rainwater collected within oil storage bunds prior to discharge to surface water. Drums are collected weekly and tank capacity is monitored and collection by third party

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			scheduled when at 75% capacity. Document Reference: Ty Coch EMP and permit documents
	c.	Safe storage operation	Currently Compliant: Operator has confirmed containers and drums are fit for purpose and stored securely. Internal weekly checks of oil storage rhinobunds and tanks are undertaken, plus independent checks completed every six months. All rhinobunds are locked and the site is itself security controlled. Electrical used insulating oil is not sensitive to any of the physical environmental factors listed. All forklifts used for the lifting of waste drums are checked weekly via a safety inspection. Any drums in poor condition are removed from circulation.
	d.	Separate area for storage & handling of packaged hazardous waste	Currently Compliant: Operator has confirmed dedicated area is used for storage and handling of packaged hazardous waste. Permitted waste (WPD used electrical oil) is stored in either 205 litre drums within dedicated rhinobunds or within a specific used oil storage tank.
5	Set up and implement procedures to reduce the environmental risk associated with handling and transfer of waste - include following elements:		
	Carried out by competent staff		Currently Compliant Operator has confirmed all staff employed in the movement of oil drums are fully qualified forklift drivers under the supervision of WAMITAB qualified staff. Permitted wastes are only transferred from the WPD lorry to the rhinobunds, used equipment bund or workshop. There are no multiple movements of permitted waste. Document Reference: Appendix 3 and 4
	Duly documented, validated and verified		Currently Compliant Operator has confirmed that all WPD used electrical insulating oil is transferred from the WPD operational sites to the Ty Coch depot via hazardous waste consignment notes. All consignments are collated quarterly for the hazardous waste consignee

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		returns. All onward collection of the permitted waste (used oil) is via hazardous waste consignment notes, copies of which are kept on site. Document Reference: Appendix 3 and 4
	Spill prevention, detection and mitigation measures	Currently Compliant Operator has confirmed that spill kits are provided throughout the site, all kits contain copies of the site drainage plan and are checked internally weekly via a site inspection and independently every six months. All site staff have viewed a spill response training DVD and are aware of the actions to prevent a spill and what to do in the event of a spill. Document Reference: Appendix 3 and 4 / ST EN2 Oil and Fuel Spill Prevention, Reporting, Containment and Response Actions plus Ty Coch EMP.
	Take precautions when mixing or blending wastes	Not applicable: Operator has confirmed no mixing or blending of waste is undertaken.
	Procedures are risk-based and consider likelihood of accidents, incidents and their environmental impact	Currently Compliant All site staff have viewed a spill response training DVD and are aware of the actions to prevent a spill and what to do in the event of a spill. Document Reference: Appendix 3 and 4 / ST EN2 Oil and Fuel Spill Prevention, Reporting, Containment and Response Actions plus Ty Coch EMP.
MONITORING		
6	Relevant emissions to water: monitor key process parameters at key locations	
	Key process parameters	
	Wastewater flow	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	pH	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Temperature	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Conductivity	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	BOD	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Other process parameters	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Key monitoring locations	
	Pre-treatment inlet and/or outlet	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Final treatment inlet	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Discharge point (to the environment)	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
	Other location	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
7	Monitoring emissions to water (refer to table) Monitoring parameters depend on waste treatment process(es) involved	Not Applicable: Operator has stated N/a within response there is no emissions to water from the Facility
8	Monitoring emissions to air (refer to table) Monitoring parameters depend on waste treatment process(es) involved	Not Applicable: Operator has stated N/a within response there is no channelled emissions to air from the Facility
9	Monitoring diffuse emissions of organic compounds to air from processes involving solvents. Use one or a combination of the following:	

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	a	Measurement – S6.2 descriptions	Not Applicable: Operator has stated N/a within response there are no diffuse emissions of organic compounds from processes involving solvents from the Facility
	b	Emissions factor calculation	Not Applicable: Operator has stated N/a within response there are no diffuse emissions of organic compounds from processes involving solvents from the Facility
	c	Mass balance calculation	Not Applicable: Operator has stated N/a within response there are no diffuse emissions of organic compounds from processes involving solvents from the Facility
10	Periodically monitor odour emissions where nuisance is expected and/or has been substantiated (monitoring frequency is outlined in BAT 12)		
	Use EN standards e.g. 13725 or 16841		Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
	Use equivalent methods e.g. ISO / national / international monitoring standards		Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
11	Annual monitoring for:		
	- Water, energy and raw materials		Currently Compliant: Operator monitors consumption through analysis / tracking of bills
	- Generation of residues and wastewater		Compliance in Future: Operator has stated N/a however this is a general BAT requirement and therefore applicable to site operations. The permit sets out reporting parameters that will form part of the annual report submitted to the Regulator at the end of January each year. Additional

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		process data has been included as part of the updated reporting parameters and forms issued as part of permit variation.
EMISSIONS TO AIR		
12	Set up, implement and review an Odour Management Plan (as part of the site EMS) where nuisance is expected and/or has been substantiated. Include ALL of the following:	
	Protocol containing actions and timelines	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
	Protocol for conducting odour monitoring (BAT 10)	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
	Protocol for response to odour incidents/complaints	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
	Odour prevention and reduction programme	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
13	Techniques to prevent, or where not practicable reduce odour emissions. Use one or a combination of the following:	
	a. Minimising residence times (open systems only)	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Use chemical treatment (N/A if desired output is hampered)	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
	c.	Optimising aerobic treatment – see examples. Refer to BAT 36 for wastes other than water-based liquid waste.	Not Applicable: Operator has stated N/a within response there are no expected odour emissions or substantiated odour complaints from the Facility
14	Techniques to prevent, or where not practicable reduce diffuse emissions to air, in particular of dust, organic compounds and odour. Use one or a combination of the following:		
	a.	Minimising potential diffuse emission sources – see examples	Not applicable: Operator has stated N/a within response. No diffuse emissions sources
	b.	Select and use high-integrity equipment – see examples	Currently Compliant: Operator has stated all plant used in the storage and drainage of used electrical insulating oil is checked every six months by an independent contractor, the check includes bund seals, bund lining, bund integrity, valves, sensors and associated pipework.
	c.	Corrosion prevention – see examples	Currently Compliant: Operator has confirmed site uses appropriate materials for primary and secondary containment for hazardous materials stored on site.
	d.	Containment, collection and treatment of diffuse emissions – see examples	Not applicable: Operator has stated N/a within response. No diffuse emissions sources
	e.	Dampening (with water or fog)	Not applicable: Operator has stated N/a within response. No diffuse emissions sources thus no requirement for dampening
	f.	Maintenance – see examples	Currently Compliant: Operator has confirmed site implements appropriate maintenance measures weekly management inspection of all site operations and plant is undertaken plus independent six-monthly checks

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	g.	Cleaning of waste treatment and storage areas – see examples	Currently Compliant: Operator has confirmed site implements appropriate cleaning measures
	h.	Leak Detection And Repair (LDAR) programme for organics – S6.2	Not applicable: No Diffuse emissions of organic compounds to air expected
15	Use flaring only for safety reasons or non-routine operating conditions (OTNOC). Use <u>both</u> of the following:		
	a.	Correct plant design – see examples	Not applicable: Operator has stated N/a within response that there is no flaring on site
	b.	Plant management including gas system balancing and advanced process control	Not applicable: Operator has stated N/a within response that there is no flaring on site
16	Reduce emissions to air when flaring is unavoidable. Use <u>both</u> of the following:		
	a.	Correct design of flaring devices – see examples	Not applicable: Operator has stated N/a within response that there is no flaring on site
	b.	Monitoring and recording as part of flare management – see examples	Not applicable: Operator has stated N/a within response that there is no flaring on site
NOISE AND VIBRATIONS			
17	Set up, implement, and regularly review a Noise and Vibration Management Plan (as part of the EMS) where nuisance is expected and/or has been substantiated. Include <u>ALL</u> of the following:		
	I.	Protocol with actions and timelines	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
	II.	Noise and vibration monitoring plan/protocol	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	III.	Noise & vibration complaint response plan/protocol	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
	IV.	Noise and vibration reduction programme	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
18	Techniques to prevent, or where not practicable reduce noise and vibration emissions. Use one or a combination of the following:		
	a.	Appropriate location of equipment and buildings	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
	b.	Operational measures – see examples	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
	c.	Low-noise equipment – see examples	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
	d.	Noise & vibration control equipment – see examples	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
	e.	Noise attenuation – see examples	Not applicable: Operator has stated N/a within response as permitted activities do not give rise to noise of vibration
EMISSIONS TO WATER			
19	Optimise water consumption, reduce wastewater generation and prevent or where not practicable reduce emissions to soil and water. Use one or a combination of the following:		
	a.	Water management – see examples	Not applicable: Operator has stated N/a within response. Minimal water consumption required on site
	b.	Water recirculation	Not applicable: Operator has stated N/a within response. No water recirculation required

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	c.	Impermeable surface	Currently Compliant: Operator has confirmed all oil storage is in bunded containers placed on impermeable surface. Site is also serviced with class 1 oil interceptor to separate oil and grease from rainwater collected within oil storage bunds prior to discharge to surface water
	d.	Reduce likelihood and impact of tank/vessel overflows and failures – see examples	Currently Compliant: Operator has confirmed all oil storage is in bunded containers placed on impermeable surface. All oil storage bunds and equipment are alarmed in event of containment failure
	e.	Roofing of waste storage and treatment areas	Currently Compliant: Operator has confirmed drums of used electrical insulation and heat transmission oils are stored in covered rhinobund
	f.	Segregation of water streams (being mindful of existing plant constraints)	Not applicable: Site does not generate multiple wastewater streams or emissions therefore no requirement for segregation
	g.	Adequate drainage infrastructure	Currently Compliant: Operator has confirmed entire site is bunded and serviced with impermeable surface. Site is also serviced with class 1 oil interceptor to separate oil and grease from rainwater collected within oil storage bunds prior to discharge to surface water. All site foul run-off within the permitted area is captured in drainage system via a single interceptor. Interceptor 1 on enclosed drainage plan. SPEL Puraceptor Class 1 - p010/2csc/ng. Oil storage capacity - 100 litres. Silt storage capacity - 1,000 litres. Labkotec oil set - 1000 high oil alarm.
	h.	Design and maintenance provisions to allow risk-based leak detection and repair. Minimise use of underground components.	Currently Compliant: Operator has confirmed independent six-monthly inspections undertaken at the site. Implemented through site Management System Document Reference: Environmental Control Systems - Inspection Sheet

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	i.	Appropriate buffer storage capacity (being mindful of existing plant constraints)	Not applicable: Operator has stated N/a within response. No requirement for buffer storage
20	Treat wastewater using a combination of:		
	<i>Preliminary, primary and general treatment</i>		
	a.	Equalisation	Not applicable: Operator has stated N/a within response no equalisation treatment measures required
	b.	Neutralisation	Not applicable: Operator has stated N/a within response no neutralisation treatment measures required
	c.	Physical separation	Currently Compliant: Site uses class 1 oil interceptor to separate oil and grease from rainwater collected within oil storage bunds prior to discharge to surface water. Interceptor 1 on enclosed drainage plan. SPCL Purceptor Class 1 - p010/2csc/ng. Oil storage capacity - 100 litres. Silt storage capacity - 1,000 litres. Labkotec oilset - 1000 high oil alarm. Site Operations do not generate wastewater effluent.
	<i>Physico-chemical treatment</i>		
	d.	Adsorption	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	e.	Distillation/rectification	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	f.	Precipitation	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	g.	Chemical oxidation	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	h.	Chemical reduction	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	i.	Evaporation	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	j.	Ion exchange	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	k.	Stripping	Not applicable: Operator has stated N/a within response there is no physico-chemical treatment of wastewater from the Facility
	Biological treatment		
	l.	Activated sludge process	Not applicable: Operator has stated N/a within response there is no biological treatment of wastewater from the Facility
	m.	Membrane bioreactor	Not applicable: Operator has stated N/a within response there is no biological treatment of wastewater from the Facility
	Nitrogen removal		
	n.	Nitrification/denitrification (where biological treatment used)	Not applicable: Operator has stated N/a within response there is no treatment of wastewater from the Facility
	Solids removal		
	o.	Coagulation and flocculation	Not applicable: Operator has stated N/a within response there is no treatment of wastewater from the Facility
	p.	Sedimentation	Not applicable: Operator has stated N/a within response there is no treatment of wastewater from the Facility
	q.	Filtration (sand, micro, ultra)	Not applicable: Operator has stated N/a within response there is no treatment of wastewater from the Facility
	r.	Flotation	Not applicable: Operator has stated N/a within response there is no treatment of wastewater from the Facility

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	BAT-AELs for DIRECT discharges to a receiving waterbody (mg/l) <i>Table 6.1 and its supporting notes. Monitoring requirements are outlined in BAT 7</i>	
	TOC 10.0-60 10-100 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	COD (TOC is preferred) 30-180 30-300 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Suspended solids 5.0-60	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	HOI 0.5-10 applying to specific waste treatments	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Total N 1-25 for biological treatment and waste oil re-refining 10-60 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			discharges to surface or groundwaters other than clean surface water run-off
	Total P	0.3-2 for biological treatment 1-3 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Phenol	0.05-0.2 for waste oil re-refining and physio-chemical treatment of waste with CV 0.05-0.3 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Free CN-	0.02-0.1 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	AOX	0.2-1 for water-based liquid waste	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Metals & Metalloids – specific waste treatments as listed in Table 6.1		
	As	0.01-0.05	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			discharges to surface or groundwaters other than clean surface water run-off
	Cd	0.01-0.05	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Cr	0.01-0.15	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Cu	0.05-0.5	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Pb	0.05-0.1	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Ni	0.05-0.5	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			discharges to surface or groundwaters other than clean surface water run-off
	Hg	0.5-5	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Zn	0.1-1	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Metals & Metalloids – treatment of water-based liquid waste		
	As	0.01-0.1	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Cd	0.01-0.1	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Cr	0.01-0.3	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			discharges to surface or groundwaters other than clean surface water run-off
	Hexavalent Cr [Cr(VI)]	0.01-0.1	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Cu	0.05-0.5	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Pb	0.05-0.3	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Ni	0.05-1	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	Hg	1.0-10	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			discharges to surface or groundwaters other than clean surface water run-off
	Zn	0.1-2	Not applicable: Permitted activities on site do not include any direct discharges of these parameters to any receiving waterbody. BAT-EALs are therefore not applicable. Operator has confirmed there are no direct discharges to surface or groundwaters other than clean surface water run-off
	BAT-AELs for INDIRECT discharges to a receiving waterbody (mg/l) Table 6.2 and its supporting notes. Monitoring requirements are outlined in BAT 7		
	HOI	0.5-10 applying to specific waste treatments	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Free CN-	0.02-0.1 for water-based liquid waste	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	AOX	0.2-1 for water-based liquid waste	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Metals & Metalloids – specific waste treatments as listed in Table 6.2		
	As	0.01-0.05	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Cd	0.01-0.05	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Cr	0.01-0.15	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Cu	0.05-0.5	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Pb	0.05-0.1	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Ni	0.05-0.5	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Hg	0.5-5	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Zn	0.1-1	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Metals & Metalloids – treatment of water-based liquid waste		
	As	0.01-0.1	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Cd	0.01-0.1	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Cr	0.01-0.3	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Hexavalent Cr [Cr(VI)]	0.01-0.1	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Cu	0.05-0.5	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Pb	0.05-0.3	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Ni	0.05-1	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Hg	1.0-10	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
	Zn	0.1-2	Not applicable: Operator has stated N/a within response there are no INDIRECT discharges from the Facility to a receiving waterbody
EMISSIONS FROM ACCIDENTS AND INCIDENTS			
21	Techniques to prevent or limit the environmental consequences of accidents and incidents, as part of the Accident Management Plan. Use <u>ALL</u> of the following:		
	a.	Protection measures – see examples	Currently Compliant: Implemented through site Management System. Site is covered by full security and CCTV. See site Fire Risk Assessment. See company standard technique ST HS13B Fire Risk Assessment and ST HS13C Provision and use of firefighting equipment on WPD premises. Document Reference: ST:EN2A; ST:EN2C
	b.	Management of incidental or accidental emissions	Currently Compliant: Implemented through site Management System. Company standard technique ST EN2A Oil and Fuel Spill Prevention, Reporting, Containment and Response Actions, EN2C – Pollution Prevention Measures at Depots and Non-Operational Property. Document Reference: ST:EN2A; ST:EN2C
	c.	Incident/accident registration and assessment system – see examples	Currently Compliant: Implemented through site Management System. All incidents and accidents are recorded on the WPD CROWN database. All incidents / accidents are reviewed to identify learning points, these

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			are communicated to all staff via 'Look and Learn' and Safety / Environment Bulletins Document Reference: ST:EN2A; ST:EN2C
MATERIAL EFFICIENCY			
22		Use materials efficiently by substituting materials with waste e.g. waste acids/alkalis for pH adjustment, fly ashes for binders	Currently Compliant: Operator has stated all used electrical insulating oil collected from Ty Coch is re-used via EOS – Electrical Oil Services who pool, reprocess and distribute the reclaimed oil to UK Distribution Network Operators.
ENERGY EFFICIENCY			
23	Use energy efficiently by using <u>both</u> of the following techniques:		
	a.	Energy efficiency plan	Compliant in Future: Operator has stated that the site does not have an Energy Efficiency Plan or Energy Balance Record in place as not relevant. As this is a general BATc requirement applicable to all sites NRW will include an Improvement Condition to ensure site implements these measures before compliance date. (IC2)
	b.	Energy balance record	Not applicable: Given the nature of site operations, and that there is no export of energy from the facility an energy balance record is not applicable to processes carried out / waste streams stored.
REUSE OF PACKAGING			

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
24	Maximise the reuse of packaging as part of a Residues Management Plan (see BAT 1 XII.)	Compliant in Future: The Operator has advised that the site reuses packaging (including drums, containers, IBCs, pallets, etc) when in good working order and when appropriate compatibility of substances to be stored. However, the Operator does not implement a Residues Management Plan in accordance with requirements stated within Table 6.5 of the WT BREF / BAT1(XII). NRW will include an Improvement Condition to ensure site implements an RMP prior to compliance date. (IC1)
MECHANICAL TREATMENT OF WASTE (GENERAL BAT)		
25	Reduce emissions to air of dust, particulate-bound metals, PCDD/F and dioxin-like PCBs by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:	
	a.	Cyclone – see S6.1
	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of waste undertaken at the Facility	
	b.	Fabric filter – see S6.1
	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of waste undertaken at the Facility	
	c.	Wet scrubbing – see S6.1
Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of waste undertaken at the Facility		

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	d.	Water injection into the shredder	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of waste undertaken at the Facility
	BAT-AEL for channelled dust emissions to air from the mechanical treatment of waste (mg/Nm3) Table 6.3 and its supporting note. Monitoring requirements are outlined in BAT 8		
	Dust	2.0-5.0	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of waste undertaken at the Facility
MECHANICAL TREATMENT OF METAL WASTE BY SHREDDING			
26	Improve overall environmental performance and prevent emissions due to accidents and incidents. Use BAT 14g <u>AND ALL</u> of the following techniques:		
	(a)	Detailed inspection procedure for baled waste before shredding	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
	(b)	Remove dangerous items from waste inputs and dispose of them in a safe manner	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
	(c)	Treatment of containers accompanied by a declaration of cleanliness	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
27	Prevent deflagrations and reduce emissions from deflagrations. Use technique a. <u>AND ONE OR BOTH</u> of techniques b. and c.		

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	a.	Deflagration management plan with reduction programme, incident review and response protocol	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
	b.	Pressure relief dampers	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
	c.	Pre-shredding (device)	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
28	Use energy efficiently by keeping the shredder feed stable		Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste by shredding undertaken at the Facility
MECHANICAL TREATMENT OF WEEE CONTAINING VFCS AND/OR VHCS			
29	Techniques to prevent, or where not practicable reduce emissions of organic compounds to air. Apply BAT 14d <u>AND</u> BAT14h <u>AND</u> technique a. <u>AND ONE OR BOTH</u> of techniques b. and c.		
	a.	Optimised removal and capture of refrigerants and oils	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCS and/or VHCs undertaken at the Facility
	b.	Cryogenic condensation	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCS and/or VHCs undertaken at the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	c.	Adsorption	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCs and/or VHCs undertaken at the Facility
	BAT-AELs for channelled TVOC and CFC emissions to air from treatment of WEEE containing VFCs and/or VHCs (mg/Nm3) <i>Table 6.4. Monitoring requirements are outlined in BAT 8</i>		
	TVOC	3.0-15	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCs and/or VHCs undertaken at the Facility
	CFCs	0.5-10	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCs and/or VHCs undertaken at the Facility
30	Prevent emissions due to explosions when treating WEEE containing VFCs and/or VHCs. Use <u>EITHER</u> of the following techniques:		
	a.	Inert atmosphere e.g. N2	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCs and/or VHCs undertaken at the Facility
	b.	Forced ventilation	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEE containing VFCs and/or VHCs undertaken at the Facility
MECHANICAL TREATMENT OF WASTE WITH CALORIFIC VALUE			
31	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Adsorption – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste with calorific value undertaken at the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Biofilter – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste with calorific value undertaken at the Facility
	c.	Thermal oxidation – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste with calorific value undertaken at the Facility
	d.	Wet scrubbing – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste with calorific value undertaken at the Facility
	BAT-AEL for channelled TVOC emissions to air from the mechanical treatment of waste with calorific value (mg/Nm³) <i>Table 6.5 and its supporting note. Monitoring requirements are outlined in BAT 8</i>		
	TVOC	10.0-30.0	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of metal waste with calorific value undertaken at the Facility
MECHANICAL TREATMENT OF WEEE CONTAINING MERCURY			
32	Reduce mercury emissions to air by collecting them at source, sending them to abatement and carrying out adequate monitoring. This includes <u>ALL</u> of the following:		
	Equipment is enclosed, under negative pressure and connected to a LEV system		Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEEE containing mercury undertaken at the Facility
	Waste gas treated using dedusting techniques – see examples – followed by adsorption on activated carbon		Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEEE containing mercury undertaken at the Facility

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Monitoring of waste gas treatment efficiency	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEEE containing mercury undertaken at the Facility
	Mercury levels measured at least weekly within treatment and storage areas	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEEE containing mercury undertaken at the Facility
	BAT-AEL for channelled mercury (Hg) emissions to air from the mechanical treatment of WEEE containing mercury (µg/Nm³) <i>Table 6.6. Monitoring requirements are outlined in BAT 8</i>	
	Hg 2.0-7.0	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical treatment of WEEE containing mercury undertaken at the Facility
BIOLOGICAL TREATMENT OF WASTE (GENERAL BAT)		
33	Reduce odour emissions and improve overall environmental performance by selecting the waste input (to ensure its suitability for biological treatment). See also BAT 2	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
34	Reduce emissions to air of dust, organic compounds and odorous compounds (including H₂S & NH₃) by using one or a combination of the following techniques:	
	a. Adsorption – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	b. Biofilter – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	c.	Fabric filter – see S6.1.	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	d.	Thermal oxidation – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	e.	Wet scrubbing – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	BAT-AEL for channelled NH₃, odour, dust and TVOC emissions to air from the biological treatment of waste (mg/Nm³) (ou_E/m³) <i>Table 6.7 and its supporting notes. Monitoring requirements are outlined in BAT 8</i>		
	NH ₃	0.3-20	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	Odour	200-1000	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	Dust	2.0-5.0	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	TVOC	5.0-40	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
35	Reduce the generation of wastewater and reduce water usage by using <u>ALL</u> of the following:		

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	a.	Segregation of water streams (see also BAT 19f)	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	b.	Water recirculation	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
	c.	Minimisation of the generation of leachate	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste undertaken at the Facility
BIOLOGICAL TREATMENT OF WASTE: AEROBIC METHODS			
36	Reduce emissions to air and improve overall environmental performance by monitoring and/or controlling key waste and process parameters. Include following elements:		
	Waste input characteristics e.g. C to N ratio, particle size		Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using aerobic methods of waste undertaken at the Facility
	Temperature and moisture content within windrows (Moisture monitoring not needed for enclosed processes where H&S issues have been identified)		Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using aerobic methods of waste undertaken at the Facility
	Aeration of the windrow		Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using aerobic methods of waste undertaken at the Facility

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Windrow porosity, height and width	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using aerobic methods of waste undertaken at the Facility
37	Reduce diffuse emissions to air of dust, odour and bioaerosols from open-air treatment steps. Use <u>ONE OR BOTH</u> of the following techniques:	
	a. Use of semi-permeable membrane covers	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using aerobic methods of waste undertaken at the Facility
	b. Adaptation of operations to the meteorological conditions	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using aerobic methods of waste undertaken at the Facility
BIOLOGICAL TREATMENT OF WASTE: ANAEROBIC METHODS		
38	Reduce emissions to air and improve overall environmental performance by monitoring and/or controlling key waste and process parameters. Include following elements:	
	<i>Implement a manual and/or automatic monitoring system to:</i>	
	Ensure a stable digester operation	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Minimise operational difficulties and associated odour emissions	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Provide sufficient early warning of system failures	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Windrow porosity, height and width	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	<i>Monitoring and/or control of key waste and process parameters – examples below:</i>	
	pH and alkalinity of the digester feed	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Digester operating temperature	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Hydraulic and organic loading rates of the digester feed	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Volatile fatty acids and NH3 concentrations within digester & digestate	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Biogas quantity, composition (e.g. H2S) and pressure	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility
	Liquid and foam levels in the digester	Not applicable: Operator has stated N/a within response as there are no activities involving the biological treatment of waste using anaerobic methods of waste undertaken at the Facility

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
MECHANICAL BIOLOGICAL TREATMENT (MBT) OF WASTE		
39	Reduce emissions to air. Generally applicable to new plants, existing plants may have layout constraints. Use <u>BOTH</u> of the following techniques:	
	a.	Segregation of the waste gas streams (refer to inventory described in BAT 3)
	Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical biological treatment (MBT) of waste undertaken at the Facility	
	b.	Recirculation of waste gas. Waste gas treatment is described in BAT 34 and recirculation in BAT 35.
		Not applicable: Operator has stated N/a within response as there are no activities involving the mechanical biological treatment (MBT) of waste undertaken at the Facility
PHYSICO-CHEMICAL TREATMENT OF SOLID AND/OR PASTY WASTE		
40	Improve overall environmental performance by monitoring the waste input as part of the waste pre-acceptance and acceptance procedures. See also BAT 2.	
	<i>Monitoring the waste input</i>	
	Content of organics, oxidising agents, metals, salts, odorous compounds	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
	H2 formation potential upon mixing of flue-gas treatment residues/ashes with water	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
41	Reduce emissions to air of dust, organic compounds and NH3 by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:	

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	a.	Adsorption – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
	b.	Biofilter – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
	c.	Fabric filter – see S6.1.	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
	d.	Wet scrubbing – see S6.1	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
	BAT-AEL for channelled NH₃, odour, dust and TVOC emissions to air from the physico-chemical treatment of solid and/or pasty waste (mg/Nm³)		
	<i>Table 6.8. Monitoring requirements are outlined in BAT 8</i>		
	Dust	2.0-5.0	Not applicable: Operator has stated N/a within response as there are no activities involving the physico-chemical treatment of solid and/or pasty waste undertaken at the Facility
RE-REFINING OF WASTE OIL			
42	Improve overall environmental performance by monitoring the waste input as part of the waste pre-acceptance and acceptance procedures. See also BAT 2.		
	Monitoring the waste input		

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Chlorinated compounds e.g. solvents or PCBs		Not applicable: Operator has confirmed within response there are no activities involving the re-refining of waste oil undertaken at the Facility
43	Reduce quantity of waste sent for disposal by using <u>ONE OR BOTH</u> of the following techniques:		
	a.	Material recovery e.g. organic residues in asphalt products	Not applicable: Operator has confirmed within response there are no activities involving the re-refining of waste oil undertaken at the Facility
	b.	Energy recovery	Not applicable: Operator has confirmed within response there are no activities involving the re-refining of waste oil undertaken at the Facility
44	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Adsorption – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the re-refining of waste oil undertaken at the Facility
	b.	Thermal oxidation – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the re-refining of waste oil undertaken at the Facility
	c.	Wet scrubbing – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the re-refining of waste oil undertaken at the Facility
	<i>The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies.</i> <i>Monitoring requirements are outlined in BAT 8</i>		
PHYSICO-CHEMICAL TREATMENT OF WASTE WITH CALORIFIC VALUE			
45	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Adsorption – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the physico-chemical treatment of waste with calorific value at the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Cryogenic condensation – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the physico-chemical treatment of waste with calorific value at the Facility
	c.	Thermal oxidation – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the physico-chemical treatment of waste with calorific value at the Facility
	d.	Wet scrubbing – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the physico-chemical treatment of waste with calorific value at the Facility
	The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies. Monitoring requirements are outlined in BAT 8		
REGENERATION OF SPENT SOLVENTS			
46	Improve overall environmental performance by using <u>ONE OR BOTH</u> of the following techniques:		
	a.	Material recovery (by evaporation from distillation residues)	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
	b.	Energy recovery e.g. using distillation residues	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
47	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using a <u>combination of</u> the following techniques:		
	a.	Recirculation of process off-gases in a steam boiler. Avoid generating PCBs and/or PCDD/Fs	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Adsorption – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
	c.	Thermal oxidation – see S6.1. Avoid generating PCBs and/or PCDD/Fs	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
	d.	Condensation or cryogenic condensation	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
	e.	Wet scrubbing – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
	<i>The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies.</i> <i>Monitoring requirements are outlined in BAT 8</i>		
BAT-AEL FOR EMISSIONS OF ORGANIC COMPOUNDS TO AIR – SECTION 4.5 (RE-REFINING OF WASTE OIL) (PHYSICO-CHEMICAL TREATMENT OF WASTE WITH CV) (REGENERATION OF SPENT SOLVENTS)			
	<i>BAT-AEL for channelled TVOC emissions to air from the re-refining of waste oil, physico-chemical treatment of waste with calorific value and regeneration of spent solvents (mg/Nm3)</i> <i>Table 6.9 and its supporting note. Monitoring requirements are outlined in BAT 8</i>		

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	TVOC	5.0-30	Not applicable: Operator has confirmed within response there are no activities involving the regeneration of spent solvents undertaken at the Facility
THERMAL TREATMENT OF SPENT ACTIVATED CARBON, WASTE CATALYSTS AND EXCAVATED CONTAMINATED SOIL			
48	Improve overall environmental performance by using <u>ALL</u> of the following techniques:		
	a.	Heat recovery from the furnace off-gas e.g. for preheating combustion air or steam generation	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	b.	Indirectly fired furnace i.e. avoids contact between the furnace contents and the burner flue-gases. Note applicability constraints.	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	c.	Process-integrated techniques to reduce emissions to air – see examples	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
49	Reduce emissions to air of HCl, HF, dust and organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Cyclone – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Electrostatic precipitator (ESP) – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	c.	Fabric filter – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	d.	Wet scrubbing – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	e.	Adsorption – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	f.	Condensation – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	g.	Thermal oxidation – see S6.1	Not applicable: Operator has confirmed within response there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	Note supporting text for BAT 49g (thermal oxidation) Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.		

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
WATER WASHING OF EXCAVATED CONTAMINATED SOIL			
50	Reduce emissions to air of dust and organic compounds from the storage, handling and washing steps by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Adsorption – see S6.1	Not applicable: Operator has confirmed within response that although the site accepts excavated contaminated soils, there are no activities involving the washing of excavated contaminated soils at the Facility
	b.	Fabric filter – see S6.1	Not applicable: Operator has confirmed within response that although the site accepts excavated contaminated soils, there are no activities involving the washing of excavated contaminated soils at the Facility
	c.	Wet scrubbing – see S6.1	Not applicable: Operator has confirmed within response that although the site accepts excavated contaminated soils, there are no activities involving the washing of excavated contaminated soils at the Facility
	Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.		
Decontamination of equipment containing PCBs			
51	Reduce emissions to air of PCBs and organic compounds and improve overall environmental performance by using <u>ALL</u> of the following techniques:		
	a.	Coating of the storage and treatment areas – see examples	Not applicable: Operator has confirmed within response there are no activities involving the decontamination of equipment containing PCBs undertaken at the Facility

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Implementation of staff access rules to prevent dispersion of contamination – see examples	Not applicable: Operator has confirmed within response there are no activities involving the decontamination of equipment containing PCBs undertaken at the Facility
	c.	Optimised equipment cleaning and drainage – see examples	Not applicable: Operator has confirmed within response there are no activities involving the decontamination of equipment containing PCBs undertaken at the Facility
	d.	Control and monitoring of emission to air – see examples	Not applicable: Operator has confirmed within response there are no activities involving the decontamination of equipment containing PCBs undertaken at the Facility
	e.	Disposal of waste treatment residues – see examples	Not applicable: Operator has confirmed within response there are no activities involving the decontamination of equipment containing PCBs undertaken at the Facility
	f.	Recovery of solvent when solvent washing is used	Not applicable: Operator has confirmed within response there are no activities involving the decontamination of equipment containing PCBs undertaken at the Facility
	Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.		
TREATMENT OF WATER-BASED LIQUID WASTE			
52	Improve overall environmental performance by monitoring the waste input as part of the waste pre-acceptance and acceptance procedures. See also BAT 2.		
	Monitoring the waste input		Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
	Bioeliminability e.g. BOD, BOD-COD ratio, Zahn-Wellens test, biological inhibition potential		

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	Feasibility of emulsion breaking e.g. lab testing	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
53	Reduce emissions to air of HCl, NH3 and organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:	
	a. Adsorption – see S6.1	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
	b. Biofilter – see S6.1	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
	c. Thermal oxidation – see S6.1.	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
	d. Wet scrubbing – see S6.1	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
	BAT-AELs for channelled HCl and TVOC emissions to air from the treatment of water-based liquid waste (mg/Nm³) <i>Table 6.10 and its supporting notes. Monitoring requirements are outlined in BAT 8</i>	
	HCl 1.0-5.0	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility
	TVOC 3.0-20	Not applicable: Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility