

Natural Resources Wales permitting decisions

Variation and Consolidation of a bespoke Permit – Slicker Recycling Ltd

We have decided to issue a Natural Resources Wales initiated variation and consolidated permit for Newport Oil Treatment Plant in 7 New Quay Road, Felhex Industrial Estate, Newport operated by Slicker Recycling Ltd.

The permit number is EPR/ZP3334AQ.

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 (IED) 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 Newport Oil Treatment Plant against the published BAT conclusions for Waste Treatment.
- Annex 1 – Decision Checklist regarding relevant BAT Conclusions.

Assessment of Newport Oil Treatment Plant against the published BAT conclusions for Waste Treatment

1. Our decision

We have issued a variation, which will allow Slicker Recycling Ltd 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 29 October 2007, 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 to 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);
- a *waste operation* subject to Environmental Permitting Regulations, however this review only applies to the installation activity as described by the Industrial Emissions Directive; and
- 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 5 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, Slicker Recycling Ltd 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.
- 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, Slicker Recycling Ltd 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 Regulation 61(1) Notice response from the operator was received on the 30 September 2019, with additional information received on the 4 June 2020 and 29 June 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. This annex 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.

A response was received from Slicker Recycling Ltd to Sections 1 to 4 of the Regulations 61(1) Notice. Following assessment of the Regulation 61(1) response, further information was requested from Slicker Recycling Ltd. 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. Where the operator has not provided sufficient information or where the existing documentation does not achieve BAT, improvement conditions have been set to ensure compliance by 2022.

In response to Section 5 of the Regulation 61(1) Notice, Slicker Recycling Ltd provided an updated Opra profile. The previous score for the site was 76. The Opra score for the site is now confirmed as 92.

In response to Section 6 of the Regulation 61(1) Notice, Slicker Recycling Ltd confirmed that a Site Condition Report was completed by Waterman Envirosystems in support of the original permit application in 2007. An updated Site Condition Report was submitted to NRW in support of their response to the Regulation 61(1) Notice (report dated September 2019). The contents of these reports satisfy the requirements as stated within the Regulation 61(1) Notice.

In response to Section 7 of the Regulation 61(1) Notice, Slicker Recycling Ltd provided an H1 assessment for emissions to water via sewer. Clean surface water run-off from the site is discharged from site via a Klargester interceptor, into a culvert that runs along the western site boundary. This collects into a pond, prior to discharge into the River Usk. All surface water from waste storage areas is collected on an impermeable concrete pad, with drainage running by gravity into a tank, where it is pumped into an oil / water reception 'skip' for treatment using caustic or another acid for pH adjustment with other process effluent, prior to discharge to sewer. Boiler blowdown water is also

directed to sewer from the site. The site has some areas of unmade ground; however, these areas are limited in their extent, and are not used for the storage of raw materials or wastes.

5. Changes we have made

Improvement Conditions

Based on the information provided in the Regulation 61(1) Notice response, we consider that we need to set a number of 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
IC10	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: (III) Planning and implementing procedures & targets, in conjunction with financial planning and investment; (XI) An inventory of wastewater and waste gas streams; (XII) Residues Management Plan; (XIII) Accident Management Plan.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC11	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 3 - In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of wastewater and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features: - information about the characteristics of the waste to be treated and the waste treatment processes; - information about the characteristics of the wastewater streams (including analysis of PFOS and PFOA); and - information about the characteristics of the waste gas streams.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC12	The operator shall submit to Natural Resources Wales for written approval, information to evidence compliance with the following BAT	17 February 2022 or otherwise

	Conclusions, in accordance with requirements specified within the Waste Treatment BREF Document (EU 2018). BAT 6 - For relevant emissions to water as identified by the inventory of wastewater streams (see BAT 3), BAT is to monitor key process parameters at key locations.	agreed in writing with Natural Resources Wales
IC13	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 7 BAT is to monitor emissions to water with at least the frequency given within BAT 7 Table, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC14	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 8 – BAT is to monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC15	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 14 In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques described within BAT 14 Table.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC16	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 19 In order to optimise water consumption, to reduce the volume of wastewater generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques described within BAT 19 Table.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC17	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 20 In order to reduce emissions to water, BAT is to treat wastewater using an appropriate combination of the techniques described within BAT 20 Table.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC18	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 and Energy Balance Record.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales

IC19	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 24 Maximise the reuse of packaging as part of a Residues Management Plan.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC20	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 44 In order to reduce emissions of organic compounds to air, BAT is to apply BAT 14d and to use one or a combination of the techniques described within BAT44 Table and Section 6.1.	17 February 2022 or otherwise agreed in writing with Natural Resources Wales

IC10 has been included in the permit as the Operator confirmed within their response dated 29 July 2020 to the Regulation 61(1) Notice that part of their Management System documentation was undergoing review and that the following aspects would be developed to meet the BAT conclusion requirements, prior to the compliance deadline:

- (III) Planning and implementing procedures & targets, in conjunction with financial planning and investment. The company has a Capital Request system, to manage and plan funding of projects. The Operator has confirmed that as per ISO14001:2015 requirements, the company has an 'aspects and impacts' register, however the register was last updated in May 2018 and is currently undergoing review and updating. This will be updated to ensure compliance with BAT conclusion 1(III);
- (XI) An inventory of wastewater and waste gas streams. Operator has stated that this requirement is implemented through the site approved management system. However, evidence has not been provided to demonstrate compliance with all items listed for each technique in BAT 3;
- (XII) Residues Management Plan. The Operator has confirmed that a Residue Management Plan is to be developed to ensure compliance with BAT conclusion 1(XII); and
- (XIII) Accident Management Plan. The Operator has confirmed that the site has accident and emergency response procedures in place, however these are to be reviewed and if applicable an Accident Management Plan developed / amended to ensure compliance with BAT conclusion 1(XIII).

IC11 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the

requirements of BAT Conclusion 3. The Operator confirmed within their response dated 29 July 2020 to the Regulation 61(1) Notice that a simplified process flow diagram for the site will be developed, and that further assessment on the characteristics of the wastewater will be undertaken. The site has a Trade Effluent Consent (TEC) which contains some parameters specified within BAT Conclusion 3, however the Operator has confirmed they will complete a one-off sample of additional parameters to establish if they are/are not present within the wastewater stream. Once this assessment has been completed the Operator will be able to update their response to BAT Conclusion 3 and finalise their wastewater inventory, in order to demonstrate compliance, prior to the compliance deadline.

For sites that have Trade Effluent Consents (TEC's) which have limits not as stringent as the BAT AELs or are missing pollutants identified in BAT3, we have set the BAT AEL's in the permits with an IC to assess the downstream treatment. For missing pollutants, they have been added to the permit as the TEC doesn't cover these limits. The Operator has confirmed that they sample their effluent for pH, colour, odour, COD, solids, Sulphate, oils and grease, and metals (Chromium, Copper, Lead, Nickel, and Zinc) in order to satisfy their TEC, however a copy of the TEC was not provided within their response, and limits not confirmed. As NRW have not been able to determine if the BAT AEL's are more stringent than the existing limits, these have been included within the permit.

IC12 and IC13 have thus also been included in the permit as the BAT Conclusions 6 7 will need to be re-visited upon completion of BAT 3 (IC11). Operator confirmed within the original response dated September 2019 that they do not currently fully comply with BAT 7, as they do not currently monitor for Hydrocarbon Oil Index (HOI), Arsenic (As), Cadmium (Cd), and Mercury (Hg). These parameters have been included within Schedule 3(b) Table S3.3 along with other parameters associated with the sites listed activities.

IC14 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the requirements of BAT Conclusion 8 and have not demonstrated how all channelled emissions to air will be suitably monitored.

IC15 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the requirements of BAT Conclusion 14.

IC16 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the requirements of BAT Conclusion 19.

IC17 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the requirements of BAT Conclusion 20.

IC18 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the requirements of BAT Conclusion 23. IC18 requires the Operator to submit an Energy Efficiency Plan and Energy Balance Record.

IC19 has been included in the permit as the Operator has not provided sufficient information within their response to the Regulation 61(1) Notice to fully satisfy the requirements of BAT Conclusion 24. IC19 requires the Operator to submit a Residues Management Plan.

IC20 has been included in the permit as the Operator confirmed within the original response dated September 2019 that they do not currently monitor for Hydrocarbon Oil Index (HOI), Arsenic (As), Cadmium (Cd), and Mercury (Hg). These parameters have been included within Schedule 3(b) Table S3.3 in addition to other relevant parameters. The Operator will need to describe the techniques used on site to reduce emissions of organic compounds to air on order to satisfy IC20.

The inclusion of the above improvement conditions will ensure that the Operators operational documentation is updated meet all relevant BAT conclusions, prior to the compliance deadline.

Operational Changes

There are a number of additional changes which have been made to the permit. These are summarised below:

- The Site Name has been amended to “Newport Oil Treatment Plant”. This is to ensure there is a clear distinction between the Operator’s company name and the name of the facility itself;
- The Introductory Note has been updated to provide clarity with regards to the installation versus waste operation activities, and to better described the processes which take place at the Facility;
- Written descriptions of waste types described within Schedule 2 have been updated to reflect current guidance (I.e. the definition of ‘dangerous’ having been replaced with ‘hazardous’);
- Additional process data to report against generation of residues and wastewater has been included as part of the updated reporting parameters within Schedule 4 of the permit, in order to satisfy requirements of BAT Conclusion 11;
- Reporting Requirements referenced within Schedule 4 have been updated to bring the permit in line with our modern permit template Reporting requirements within existing permit did not make sense and were not enforceable. Previous errors have been corrected and reporting now reflects monitoring requirements as stated within Schedule 3;
- The emission point references listed within Tables S3.1, S3.2, S3.3 and S4.1 were not illustrated within the Site layout and boundary plan within Schedule 7 of the permit. Both the site plan within Schedule 7 and the emission point references have been updated to ensure their locations are clearly identifiable;
- The reporting requirements for emissions to air stated within Schedule 4(a) Table S4.1 have been removed as there are no associated monitoring requirements stated within Schedule 3(a), Table S3.1;
- Reference to a surface water discharge consent within Tables S3.2 has been removed, as there is no evidence that the site has a consent to discharge to surface waters;
- Emissions to air are from tank vents. TVOC BAT-AELs have been added for these vents. Please note that these may not apply if the operator can demonstrate emission loads are below 2kg/hr (The Operator will need to submit evidence as part of their response to IC11 and IC14);
- Parameters listed within Schedule 3(b) Table S3.3 for discharges to sewer include parameters against re-refining of oil BAT AELs. Within the responses to the Reg 61(1) Notice, you advised that TEC limits are higher than BAT-AELs for the parameters covered and stated that “downstream WwTW do not actively

abate parameters however the activated sludge process would offer reducing factors". We have included BAT-AEL limits within tables as the justification provided isn't sufficient to demonstrate suitable 'abatement downstream'; and

- Wording within Table S1.1 against A3 and A4 DAA's was poorly phrased and doesn't meet current standards. Text has been edited to remove ambiguity.

Table S1.1 references and existing Medium Combustion Plant (MCP) as defined under the Medium Combustion Plant Directive (MCPD). ELVs and monitoring for existing MCPs & SGs is not required until 1st January 2025 at the earliest. As this is some way off, NRW have decided to maintain any existing ELVs and monitoring requirements in the permit and not to impose new stricter ELVs ahead of time.

Within the response submitted in September 2019, you requested that the variation incorporates the inclusion of a new activity (against BAT 27). Unfortunately, this falls outside the scope of the WT BREF Review Project and can thus has not been included as part of this variation. Another application will need to be submitted to NRW to cover any additional proposed change to Operations.

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".

The company used the H1 electronic screening tool to present the emissions data and to carry out the Phase 1 screening tests and a copy was provided as part of the response to the Regulation 61 Notice.

The specific BAT Conclusions on water emissions were also reviewed based on the Waste Treatment BREF and the following changes are made to the ELV's for emissions to water taking into account BAT Conclusion 20 from the BREF.

The tables below outline the parameters and limits set to implement the BAT-AELs:

Effective until 16 August 2022

Emission point ref. & location	Parameter	Limit/ BAT AEL	Effective until
S1 emission to Nash Wastewater Treatment Works Via Foul Sewer [Point S1 on site plan in Schedule 7]	Mercury and its compounds, expressed as mercury (Total Hg)	0.005 mg/l	16 August 2022

BAT AELs have been amended for the following parameters (BAT AELs).

Effective from 17 August 2022

Emission point ref. & location	Parameter	Limit/ BAT AEL	Effective from
S1 emission to Nash Wastewater Treatment Works Via Foul Sewer [Point S1 on site plan in Schedule 7]	Flow	None set	17 August 2022
	Hydrocarbon oil index (HOI) ⁽²⁾⁽³⁾	10 mg/l	17 August 2022
	Arsenic (As) ⁽¹⁾⁽²⁾⁽³⁾	0.05 mg/l	17 August 2022
	Cadmium (Cd) ⁽¹⁾⁽²⁾⁽³⁾	0.05 mg/l	17 August 2022
	Chromium (Cr) ⁽¹⁾⁽²⁾⁽³⁾	0.15 mg/l	17 August 2022
	Copper (Cu) ⁽¹⁾⁽²⁾⁽³⁾	0.5 mg/l	17 August 2022
	Nickel (Ni) ⁽¹⁾⁽²⁾⁽³⁾	0.5 mg/l	17 August 2022
	Lead (Pb) ⁽¹⁾⁽²⁾⁽³⁾	0.1 mg/l	17 August 2022
	Zinc (Zn) ⁽¹⁾⁽²⁾⁽³⁾	1 mg/l	17 August 2022
	Mercury and its compounds, expressed as mercury (Total Hg) ⁽¹⁾⁽²⁾	5 µg/l	17 August 2022
	PFOA ⁽¹⁾⁽²⁾	None set	17 August 2022
	PFOS ⁽¹⁾⁽²⁾	None set	17 August 2022

Note 1: Monitoring of parameters only apply if substances are identified as relevant following completion of the wastewater inventory required by BAT 3 of the Waste Treatment BREF Document (EU 2018), to be provided as part response to IC11 by the operator.

Note 2: In the case of an indirect discharge to a receiving water body, the monitoring frequency may be reduced if the downstream wastewater treatment plant abates the pollutants concerned.

Note 3: The BAT-AELs may not apply if the downstream wastewater treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment.

Where BAT associated emission levels are identified (BAT-AELs), limits may be prescribed at the top end of the range unless the proximity of sensitive receptors requires a tighter limit or if tighter limits are previously on the permit, this ensures no backsliding of emission limits.

The Permit requires an improvement condition (IC13) to review all monitoring methods for the new permitted parameters and limits listed above.

Emissions to Water – Article 15(4) Derogations

No derogations.

Emissions to Air

There were changes to the Emission Limit Values (ELV's) for emissions to air taking into account BAT conclusions from the Waste Treatment BREF.

The tables below outline the parameters and limits set to implement the BAT-AELs:

Effective until 16 August 2022

Release point	Parameter	Limit/ BAT AEL	Effective until
C1-C2 [Points C1-C2 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
E1 [Point E1 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
F1 [Point F1 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
P1-P7 [Points P1-P7 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
S1-S9 [Points S1-S9 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
	Oxides of Sulphur	No Limit Set	16 August 2022
	Carbon Monoxide	No Limit Set	16 August 2022
RS1-RS3 [Points RS1-RS3 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
99 [Point 99 on site plan in Schedule 7]	Class A VOCs	No Limit Set	16 August 2022
	Class B VOCs	No Limit Set	16 August 2022
	Ammonia	No Limit Set	16 August 2022
	Hydrogen Sulphide	No Limit Set	16 August 2022
Boiler Room [Boiler Room on-site plan in Schedule 7]	Oxides of Nitrogen	No Limit Set	16 August 2022
	Oxides of Sulphur	No Limit Set	16 August 2022
	Carbon Monoxide	No Limit Set	16 August 2022

Effective from 17 August 2022

Release point	Parameter	Limit/ BAT AEL	Effective from
C1-C2 [Points C1-C2 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
E1 [Point E1 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
F1 [Point F1 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
P1-P7 [Points P1-P7 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
S1-S9 [Points S1-S9 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
	Oxides of Sulphur	No Limit Set	17 August 2022
	Carbon Monoxide	No Limit Set	17 August 2022
RS1-RS3 [Points RS1-RS3 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
99 [Point 99 on site plan in Schedule 7]	TVOCs ¹	30mg/Nm ³	17 August 2022
	Ammonia	No Limit Set	17 August 2022
	Hydrogen Sulphide	No Limit Set	17 August 2022
Boiler Room [Boiler Room on-site plan in Schedule 7]	Oxides of Nitrogen	No Limit Set	17 August 2022
	Oxides of Sulphur	No Limit Set	17 August 2022
	Carbon Monoxide	No Limit Set	17 August 2022

Note 1 The BAT-AEL does not apply when the emission load is below 2 kg/h at the emission point provided that no CMR substances are identified as relevant in the waste gas stream, following completion of the waste water inventory required by BAT 3 of the Waste Treatment BREF Document (EU 2018), to be provided as part response to IC11 by the operator.

Where BAT associated emission levels are identified (BAT-AELs), limits may be prescribed at the top end of the range unless the proximity of sensitive receptors requires a tighter limit or if tighter limits are previously on the permit, this ensures no backsliding of emission limits.

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. The revised BREF and its BAT-AELs provide 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 is certified to ISO14001:2015 standards. Approval number: 9539-EMS-001. Expiry Date: 11 Oct 2020. The requirements of ISO14001:2015 includes evidence of management commitment.
	II. Environmental policy development including CI of performance	Currently Compliant: Implemented through site Management System Document Reference: Environmental Policy found in the company's compliance pack on the website.

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			https://www.slickerrecycling.com/about-us/legislation-policies-and-accreditation
	III.	Planning and implementing procedures & targets in conjunction with financial planning & investment	Compliant in Future: Implemented through site Management System Document Reference: 'aspects and impacts' register. The company has a Capital Request system, to manage and plan funding of projects. The register is currently undergoing review / updating. Improvement Condition included within permit to ensure compliance prior to compliance deadline (IC10)
	IV.	Implementation of procedures	
		(a) Structure & responsibility	Currently Compliant: Implemented through site Management System. Slicker Recycling has a full (general) Organisation Chart, showing all employees in the UK. Newport site is headed by a Site Supervisor, with other employees being Site Operatives. Job descriptions available for all staff on site.
		(b) Recruitment, training, awareness & competence	Currently Compliant: Implemented through site Management System A companywide recruitment process exists, which includes a RAF (Recruitment Authorisation Form). The RAF requires multiple documents and evidence (e.g. job descriptions) to be signed off. Document Reference: Training Matrix - available to review on site
		(c) Communication	Currently Compliant: Implemented through site Management System. Full set of procedures in each employee's training folder. Recent changes, such as Third Party ULO Acceptance Specification (Rev.C - 26th May 2020) available in the Laboratory.
		(d) Employee involvement	Currently Compliant: Implemented through site Management System. Each plant operative has a training file / folder available in the Site Supervisor's office. Up to 38 procedures or processes in each folder

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
			(quantity is operative specific). Document Reference: Annual 'Health, Safety and Environmental Meeting' held in June 2019 with the two site CoTC holders, the Garage Waste Manager, HSEQ Manager and the HSEQ Administrator. A copy is available on request.
		(e) Documentation	Currently Compliant: Implemented through site Management System. Each plant operative has a training file / folder available in the Site Supervisor's office. Up to 38 procedures or processes in each folder (quantity is operative specific). Daily visual checks / observations are completed by staff while carrying out their normal routines. Formal documented weekly checks of the site, primary and secondary containment is completed. Monthly site checks are formally documented for interceptors and the penstock valve. The site boiler has daily (operational) and weekly (safety) checks completed and logged. All records are retained on site and are available for inspection by the Site Officer.
		(f) Effective process control	Currently Compliant: Implemented through site Management System. All waste movements on/off site are logged on the site 'ins & outs' document, which is distributed daily to Transport (including Director), Operations (including Director) and Finance. A site weekly stock take is logged on a standard template and distributed to Transport, Operations (including Director) and Finance. Document Reference: Operating procedures 007 OP rejection of non-compliant waste 010 OP Rejection of Non-Compliant Waste in Drums

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		(g) Maintenance programmes	Currently Compliant: Implemented through site Management System. All plant and equipment maintained and certified / inspected by third party companies as appropriate or required by legislation. Document Reference: Maintenance Records available on site
		(h) Emergency preparedness & response	Currently Compliant: Implemented through site Management System. Document Reference: Folder in Site Supervisor office with OP 014 (V1) - Emergency Procedure OP 017 (V1) - Spill Management Procedure Site has various spill kits (4 off) and clay manway covers / mats available.
		(i) Safeguarding compliance with environmental legislation	Currently Compliant: Implemented through site Management System. Monthly regulatory updates via a third-party service supplied by Waterman Greenspace. Environmental regulator inspection CAR Reports. Alpha Logix system (bookings) only allows waste to be consigned to the Newport site if the EWC code matches what is permitted.
	V.	<i>Checking performance and taking corrective action</i>	
		(a) Monitoring & measurement	Currently Compliant: Implemented through site Management System, ISO14001:2015 required standards. All waste oil is checked against the 'Third Party ULO Acceptance Specification' (Rev.C - 26th May 2020) before offloading. Criteria is based on physical and chemical properties, as well as a restricted set of EWC codes. Analysis is stapled to the respective waste consignment note and weighbridge slip. Key internal parameters are reported in the site 'ins and outs' to a wider audience (off site). All effluent is analysed before discharge. Results are logged on a log sheet (eco.tem.041), which has the discharge limits stated as appropriate. Independent analysis of effluent is carried out by Dwr Cymru Welsh Water

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			(at their discretion). Daily v-notch weir flow readings are logged on site and records retained. The v-notch system has full calibration and inspection records, which are available to view by the Site Officer
		(b) Corrective and preventive action	Currently Compliant: Implemented through site Management System, ISO14001:2015 required standards. Prevention - Waste oils that do not meet the 'local acceptance criteria' are either escalated as per the workflow set out in 'Third Party ULO Acceptance Specification' (Rev.C - 26th May 2020) or rejected from site. Corrective action measures for non-conformity with EMS part of , ISO14001:2015 required standards.
		(c) Maintenance of records	Currently Compliant: Implemented through site Management System, ISO14001:2015 required standards for maintaining EMS records. Waste consignment notes, with associated weighbridge and analytical results are retained in the Plant Laboratory for at least 3 years. Effluent analysis (internal and external) and flow rate records are retained in the Water Laboratory for at least 3 years.
		(d) Independent (where practicable) internal or external EMS auditing	Currently Compliant: Site operates under an Environmental Management Systems (EMS) which is certified to ISO14001:2015 standards. Approval number: 9539-EMS-001. Expiry Date: 11 Oct 2020. External auditing undertaken
	VI.	Senior management review of EMS	Currently Compliant: Implemented through site Management System. Management EMS reviews attended by the HSEQ Manager and the Managing Director. HSEQ Manager reports KPIs monthly to the Executive Management team, who meet monthly.
	VII.	Following development of cleaner technologies	Currently Compliant: Implemented through site Management System. Slicker Recycling has looked at and considered new technologies on site including;-

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			1) oil filter shredding, with oil recovery and metal/paper separation technology 2) plastic shredding and washing capabilities 3) bin washing facilities 4) transformer oil processing Slicker continues to assess and monitor technology developments and where both environmentally beneficial and economically feasible pursue these further.
	VIII.	Whole life cycle considerations when designing a new plant i.e. impacts from eventual decommissioning and throughout its operating life	Currently Compliant: Implemented through site Management System. For the introduction or addition of new processes on site, Slicker Recycling first look to consider what existing equipment can be reused or repurposed, thereby extending the usable life of equipment on site. Due to the existing layout and significant number of smaller tanks (versus say a site with only 4 or 5 tanks), the facility provides a good level of flexibility. This flexibility is also important in day to day operations, as it allows individual tanks to be taken out of service for maintenance without affecting plant operations. Due to the large number of small tanks, as individual tanks approach the end of their usable life (i.e. become uneconomical to maintain and/or repair), the decommissioning and/or replacement of the tanks can be managed as a series of small projects. All tanks on site are above ground.
	IX.	Regular sectoral bench marking	Currently Compliant: Implemented through site Management System. At the time of licencing / permitting, the site was benchmarked against Sector Guidance, as required to obtain the relevant approval(s). External 'duty of care' audits are also used as a benchmark against other companies in the sector. Most recent example being a DOC audit of Malary Ltd in Cambridshire on 12th February 2020, with associated report

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			and documents. Slicker Recycling are also an active member of the Oil Recycling Association (ORA), who regularly share and debate non-commercially sensitive topics related to the industry sector that Slicker Recycling operate within.
	X.	Waste stream management (BAT 2)	Currently Compliant: Implemented through site Management System. See responses provided against BAT2 below
	XI.	Inventory of wastewater & waste gas streams (BAT 3)	Compliance in Future: Operator has stated that this requirement is implemented through the site approved management system. However, sufficient evidence has not been provided to demonstrate compliance with all items listed for all wastewater & waste gas streams associated with site activities. An improvement condition has been added to the permit to ensure the Operator is compliant with this requirement before the compliance deadline (IC10)
	XII.	Residues Management Plan – S6.5	Compliance in Future: Operator has stated site manages residues on site however this is not currently documented and no RMP currently in place. Improvement Condition included within permit variation to ensure compliance prior to compliance deadline (IC10)
	XIII.	Accident Management Plan – S6.5	Compliance in Future: Operator has stated Accidents are managed as per Section 17 of the company IMS Manual Version 6. All sites have dedicated accident reporting forms. HSEQ Manager reports (high level summary) accidents on a monthly basis to the Executive Management team, who meet monthly. Accidents and incidents form part of the monthly KPIs. Procedure 031 OP Management of incidents and near misses eco.031 used on site. The site accident and emergency response procedures are to be reviewed and if applicable an Accident Management Plan developed / amended.

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			Improvement Condition included within permit variation to ensure compliance prior to compliance deadline (IC10)
	XIV.	Odour Management Plan (BAT 12)	Currently Compliant: Operator has stated the processes on site are not odorous. See comments against BAT Conclusion 10, 12 & 13
	XV.	Noise & Vibration Management Plan (BAT 17)	Currently Compliant: Operator has stated the only 'standard' process or activity that generates noise on site is the site steam boiler. This unit is housed inside of a building with clear 'Hearing Protection' PPE signage at the entrance. The company also has a Health and Safety Guidance note covering Noise (Document 'GN 24 Noise', with the current version being Version 2 Rev1 issued on 24th December 2019. None of the other processes on site produce any significant noise or vibration. See comments against BAT Conclusion 17
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. The majority of waste is booked in through Slicker Recycling's call centre. The booking system (SAGE) requires a number of fundamental inputs including, but not limited to, quantities of individual wastes, as well as associated EWC codes (pre-acceptance checks). Once a collection is routed, the Slicker Recycling drivers provide the next level of pre-screening and for waste acceptance. If wastes are visually wrong, the drivers can reject the waste and/or collect a sample for analysis by one of the Slicker Recycling sites before a recollection is booked. Each driver has contact routes to a transport planner, a call centre 'buddy' (to manage customers) and site managers. In local oil collection vehicles, drivers have the ability to segregate waste oil in dedicated pots.

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			At the site, all waste oil is checked against the 'Third Party ULO Acceptance Specification' (Rev.C - 26th May 2020) before offloading. The current update has been driven by changes of the waste oil outlet, with oil due to be sent to a Re-refinery Joint Venture in Denmark starting later in 2020. Where a driver suspects oil is of a poor or unacceptable quality, as per procedure eco.op.011 (WASTE OIL COLLECTION PROCEDURE), drivers are to reject the collection and take a sample back to one of the company sites for further investigation.
	b.	Set up and implement waste acceptance procedures	Currently Compliant: Implemented through site Management System. All waste oil is checked against the 'Third Party ULO Acceptance Specification' (Rev.C - 26th May 2020) before offloading. All solids waste is handled (and rejected if applicable) as per procedure eco.op.010 (REJECTION OF WASTE IN DRUMS OR OTHER 'SMALL' CONTAINERS)
	c.	Set up and implement a waste tracking system & inventory	Currently Compliant: Implemented through site Management System. All waste movements on/off site are logged on the site 'ins & outs' document, which is distributed daily to Transport (including Director), Operations (including Director) and Finance. A site weekly stock take is logged on a standard template and distributed to Transport, Operations (including Director) and Finance
	d.	Set up and implement an output quality management system	Currently Compliant: Implemented through site Management System. The Newport site is set up as a provisional treatment/sorting and bulking facility. The main quality control on used lubricating oils is completed on all incoming waste oil, where oil is tested to an acceptance specification. All waste oil leaving site has basic analysis completed on it, with results logged and filed on site.

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		Effluent output control checks are completed both on site and by Dwr Cymru Welsh Water (at their discretion).
	e.	Ensure waste segregation
	f.	Ensure waste compatibility prior to mixing or blending
	g.	Sort solid incoming waste – S6.4
3	Establish and maintain a wastewater and waste gas inventory as part of the EMS - <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
	Information on characteristics of waste and waste treatment processes	
	(i)(a)	simplified process flow sheets showing emission sources
	Compliance in Future: Operator has stated Site has P&ID drawings available for all storage tanks and active processes. More simplified process flowsheets are not available specific to showing emission sources. Site plot plan showing all emissions points is in development (NPT-GA-013). An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)	
	(i)(b)	Process-integrated and wastewater/waste gas treatment descriptions including performance
	Compliance in Future: Operator has advised wastewater / waste gas treatment descriptions Implemented through site Management System. Effluent on site is handled through a number of ambient effluent tanks, where pH can be adjusted. Prior to discharge from site, all effluent (batches) is sampled, analysed on site and by Dwr Cymru Welsh Water (at their discretion). Results are reported against discharge limits, using form eco.tem.041. Document Reference: Procedure 026 OP effluent treatment Newport eco.op.026. However, not all wastewater / waste gas treatment is fully addressed (see BAT 3 below). An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)	
	Information on characteristics of wastewater streams	
(ii)(a)	<i>Mean and variability of:</i>	
	Flow	Currently Compliant: Operator has stated V-notch flow daily totaliser reading logged.
	pH	Currently Compliant: Operator has stated, the site can adjust pH of the effluent through the use of sodium hydroxide. This is the only treatment of water on site. pH of every batch tested and logged on form eco.tem.041, which states discharge limits.

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
		Independent pH testing done by Dwr Cymru Welsh Water (at their discretion). This is in line with Trade Effluent Consent.
		Not Applicable: All effluent is ambient temperature on site. This is in line with Trade Effluent Consent.
		Not Applicable: This is in line with Trade Effluent Consent.
	(ii)(b)	<i>Mean concentration, load and variability of:</i>
		Currently Compliant: Operator has stated, solids of every batch tested and logged on form eco.tem.041, which states discharge limits. Independent TSS testing done by Dwr Cymru Welsh Water (at their discretion).
		Currently Compliant: Operator has stated, COD of every batch tested and logged on form eco.tem.041, which states discharge limits. Independent COD testing done by Dwr Cymru Welsh Water (at their discretion).
		Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.
		Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.
		Currently Compliant: Operator has stated, specific metal of every batch tested and logged on form eco.tem.041, which states discharge limits. Independent specific metal testing done by Dwr Cymru Welsh Water (at their discretion). However not all metals fully considered in accordance with BAT (see BAT 7 & 20 below). An Improvement Condition has been

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
			included within permit variation to ensure compliance prior to compliance deadline (IC11)
		Priority substances/micropollutants	Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.
		Any other relevant compounds	Compliant in Future: Operator has stated, specific metal of every batch tested and logged on form eco.tem.041, which states discharge limits. Independent specific metal testing done by Dwr Cymru Welsh Water (at their discretion). However other relevant compounds not fully considered in accordance with BAT (Also see BAT 7 & 20 below). An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
	(ii)(c)	<i>Bioeliminability data (see BAT 52):</i>	
		BOD	Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.
		BOD to COD ratio	Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.
		Zahn-Wellens test	Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.

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
		Biological inhibition potential	Not applicable: Operator has stated, no specific compliance requirements required by the Trade Effluent Consent. Slicker Recycling will look to complete a single 'one off' sample by 2022 to demonstrate compliance against the red/grey BREF substance lists.
	Information on characteristics of waste gas streams		
	(iii)(a)	<i>Mean and variability of:</i>	
		Flow	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
		temperature	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
	(iii)(b)	<i>Mean concentration, load and variability of relevant substances:</i>	
		Organic compounds	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
		POPs e.g. PCBs	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)

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		Any other relevant compounds	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
	(iii)(c)	Flammability	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
		Lower and Higher Explosive Limits	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
		Reactivity	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
	(iii)(d)	<i>Presence of other substances that may affect the gas treatment system or plant safety:</i>	
		O2	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
		N2	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)

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 vapour	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
		Dust	Compliant in Future: The Operator has not provided sufficient information to demonstrate compliance with this BAT Conclusion. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC11)
4	Reducing environmental risk associated with waste storage – <u>ALL</u> of the following:		
	a.	Optimised storage location	Currently Compliant The site has a total storage capacity of 1,551.8 m3, although currently tanks R1 – R3 and tank 99 are redundant. Of the site capacity, 756.8 m3 is used for the storage of lubricating oil, 403 m3 of which includes heating coils and insulation for oil processing. Soluble oil and anti-freeze are both stored in 61 m3 tanks, and there is 317 m3 tank capacity for effluent storage. 138 m3 store raw materials such as fuels or Sodium Hydroxide. The site has sufficient storage and treatment capacity for the current operations and retains the potential for bringing currently redundant tanks back into service should further capacity become required. The site maximum annual throughput is 40,000 tonnes, and this and the storage infrastructure to facilitate that are adequate for current needs. The site layout is optimised with a weighbridge located at the entrance gate. One-direction vehicle movement across the site. In the north western corner of the site, a process building stores the rag - washing operation and valuable wastes which may promote unauthorised access and theft, e.g. batteries) are stored within this lockable building, although may also be stored temporarily on the yard during receipt or
	b.	Adequate storage capacity	
	c.	Safe storage operation	
	d.	Separate area for storage & handling of packaged hazardous waste	

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
		while awaiting transfer. Bunded tank storage is located along the diagonal boundary which runs from the northwest to the southeast of the site, and in the very south eastern corner of the site, other liquids and containers with the potential to still contain liquids are stored. This area of the site drains to collection vessels prior to being pumped into the storage and treatment tanks. The site is fenced, gated and locked when not manned. CCTV cameras are present with remote access.
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: Implemented through site Management System A companywide recruitment process exists, which includes a RAF (Recruitment Authorisation Form). The RAF requires multiple documents and evidence (e.g. job descriptions) to be signed off. Document Reference: Training Matrix - available to review on site
	Duly documented, validated and verified	Currently Compliant Implemented through site Management System Document Reference: 004 OP Sampling of bulk loads; 005 OP Acceptance and unloading of waste in bulk; 007 OP Rejection of waste in bulk; 012 OP Acceptance and unloading of waste in drums; 015 OP loading of bulk oils
	Spill prevention, detection and mitigation measures	Currently Compliant: Site bunds meet the volume containment criteria required. Historic third-party assessments and most current bund calculations are available on site for inspection by the local Site Officer. Weekly site checks, including primary and secondary containment. Monthly penstock valve check.

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
		Site has 4 off spill kits and clay manway covers. Document Reference: Procedure OP 014 Emergency Procedure - Newport Waste Transfer Station. Procedure OP 017 Spill Management. Site also has an accident management plan. All key documents are stored in a dedicated and easily accessible folder. Out of hours (no staff on site), the facility is locked and covered by CCTV, the latter of which can be remotely accessed, monitored and is continuously recorded.
	Take precautions when mixing or blending wastes	Currently Compliant: Implemented through site Management System. Oil and effluents are tested before offloading into their separate systems. Incompatible or non-licensed materials are rejected from site. A small quarantine area is available for any solid wastes that need to be isolated or segregated in the South East corner of site.
	Procedures are risk-based and consider likelihood of accidents, incidents and their environmental impact	Currently Compliant: Operator has stated that the site has 4 off spill kits and clay manway covers. Document Reference: Procedure OP 014 Emergency Procedure - Newport Waste Transfer Station. Procedure OP 017 Spill Management. Site also has an accident management plan. All key documents are stored in a dedicated and easily accessible folder. Out of hours (no staff on site), the facility is locked and covered by CCTV, the latter of which can be remotely accessed, monitored and is continuously recorded.
MONITORING		
6	Relevant emissions to water: monitor key process parameters at key locations	

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	Key process parameters	
	Wastewater flow	
	pH	Compliant in Future: The Operator has advised that effluent discharge is monitored for flow and temperature automatically using an MCERTS certified flow-meter (a Pulsar Process Measurement Limited FlowCERT Lite), and sampling is undertaken using an Aquamatic Aquacell continuous sampler. Samples are tested on site in the in-house laboratory for pH, colour, odour, COD, solids, Sulphate, oils and grease, and metals (Chromium, Copper, Lead, Nickel, and Zinc), in line with the limits specified in the TEC. Dwr Cymru Welsh Water also take samples at their discretion. However, the Operator has not stated how future monitoring will be in accordance with the BREF BAT Conclusions. An Improvement Condition has thus been added to the permit to ensure the site is compliant, prior to compliance deadline (IC12)
	Temperature	
	Conductivity	
	BOD	
	Other process parameters	
	Key monitoring locations	
	Pre-treatment inlet and/or outlet	Compliant in Future: The Operator has advised that effluent discharge is monitored for flow and temperature automatically using an MCERTS certified flow-meter (a Pulsar Process Measurement Limited FlowCERT Lite), and sampling is undertaken using an Aquamatic Aquacell continuous sampler. Samples are tested on site in the in-house laboratory for pH, colour, odour, COD, solids, Sulphate, oils and grease, and metals (Chromium, Copper, Lead, Nickel, and Zinc), in line with the limits specified in the TEC. Dwr Cymru Welsh Water also take samples at their discretion. However, the Operator has not stated how future monitoring will be in accordance with the BREF BAT Conclusions. An Improvement
	Final treatment inlet	
	Discharge point (to the environment)	
	Other location	

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		Condition has thus been added to the permit to ensure the site is compliant, prior to compliance deadline (IC12)
7	Monitoring emissions to water (refer to table) Monitoring parameters depend on waste treatment process(es) involved	Compliant in Future Operator has stated site does not currently monitor all appropriate parameters to the frequency stated within the BREF BAT Conclusion. Operator has confirmed monitoring of emissions to water will be updated to be consistent with standards prior to compliance date. NRW to include improvement condition to ensure site implements these measures before compliance date. (IC13)
8	Monitoring emissions to air (refer to table) Monitoring parameters depend on waste treatment process(es) involved	Compliant in Future Operator has stated emission points to air are not currently monitored. Although the site processes contribute to the re-refining of waste oil, the operations form the initial stages of the process resulting in simple heating and dewatering rather than complex physico-chemical treatment measures. Historic analysis and regular risk assessment suggest that the contribution of TVOCs to atmosphere are sufficiently low so as to be insignificant. Monitoring of TVOC for re-refining of waste oil is required under BATc therefore NRW will include an improvement programme to ensure site implements monitoring measures before compliance date. (IC14)
9	Monitoring diffuse emissions of organic compounds to air from processes involving solvents. Use one or a combination of the following:	
	a	Measurement – S6.2 descriptions
	b	Emissions factor calculation
	c	Mass balance calculation
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	

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	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. (NB. Site has previously received odour compliant, however this was determined as originating from nearby landfill site)
11	Annual monitoring for:	
	- Water, energy and raw materials	Currently Compliant Operator monitors consumption and performance parameters for water, energy and raw materials usage, which is recorded and reported annually to NRW. Total use and consumption specific to throughput are reported.
	- Generation of residues and wastewater	Compliant 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 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 <u>ALL</u> 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. As per the response to BAT 10, while no formal odour management plan is in place or considered to be necessary, any observation of odour would be recorded in the Site Daily Diary, and all
	Protocol for conducting odour monitoring (BAT 10)	
	Protocol for response to odour incidents/complaints	
	Odour prevention and reduction programme	

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
		complaints of odour would be investigated thoroughly. Should an odour issue arise, an odour management plan would be formulated and worked to.
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)
	b.	Use chemical treatment (N/A if desired output is hampered)
	c.	Optimising aerobic treatment – see examples. Refer to BAT 36 for wastes other than water-based liquid waste.
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
	b.	Select and use high-integrity equipment – see examples
Compliant in Future: Operator has stated that wastes brought onto site undergoes pre-acceptance and/or acceptance screening. On tanks with potential for heating (steam coils), Slicker Recycling are to consider installation of abatement or disconnection of the steam supply to the relevant tank(s). An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC15)		Currently Compliant: Steam boiler. Maintenance and regulatory inspections (PED) are completed by British Engineering Services. Most recent boiler report - ID:36524193, issued 14/02/2020, next inspection 09/02/2021 Procedure OP 028 Operation of Steam Raising Boiler Plant LOLER inspections completed 6 monthly by BRAID.

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.	Corrosion prevention – see examples	Currently Compliant: Operator has confirmed that staff conduct weekly site checks, including checks on primary and secondary containment. Routine water treatment is carried out on the boiler feed water to prevent corrosion.
	d.	Containment, collection and treatment of diffuse emissions – see examples	Currently Compliant: Operator has confirmed that weekly site checks, including primary and secondary containment. Monthly penstock valve check. Site has 4 off spill kits and clay manway covers. Procedure OP 014 Emergency Procedure - Newport Waste Transfer Station. Procedure OP 017 Spill Management.
	e.	Dampening (with water or fog)	Not applicable: No dust generating materials are handled on site
	f.	Maintenance – see examples	Currently Compliant: Operator has confirmed that maintenance is implemented through site Management System. All plant and equipment maintained and certified / inspected by third party companies as appropriate or required by legislation. Document Reference: Maintenance Records available on site
	g.	Cleaning of waste treatment and storage areas – see examples	Currently Compliant: Operator has confirmed that the site is cleaned as and when required. High pressure industrial water jetter unit (Karcher HDS 10/20-4M) available on site. Use of TLF detergent for use in potential oil contamination areas.
	h.	Leak Detection And Repair (LDAR) programme for organics – S6.2	Currently Compliant: Operator has confirmed that weekly site checks, including primary and secondary containment are completed by site staff. No requirement identified for formal external company checks.
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	

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.	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:		Not applicable. Operator has stated N/a within response that there is no flaring on site
	a.	Correct design of flaring devices – see examples	
	b.	Monitoring and recording as part of flare management – see examples	
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:		Not applicable. Operator has stated N/a within response as permitted activities do not give rise to noise or vibration. The site has not received any substantiated noise complaints thus this BATc is not currently applicable. Any observation of noise or vibration would be recorded in the Site Daily Diary, and all complaints of noise or vibration would be investigated thoroughly.
	I.	Protocol with actions and timelines	
	II.	Noise and vibration monitoring plan/protocol	
	III.	Noise & vibration complaint response plan/protocol	
	IV.	Noise and vibration reduction programme	
18	Techniques to prevent, or where not practicable reduce noise and vibration emissions. Use one or a combination of the following:		Currently Compliant Operator has stated the site operations are not inherently noisy and nor are there any processes on site which vibrate significantly. As such, it is not considered necessary to apply the techniques for the prevention or reduction of noise and vibration emissions. However, the inclusion of any new process or plant at the site will be considered prior to installation for its potential to create noise and
	a.	Appropriate location of equipment and buildings	
	b.	Operational measures – see examples	
	c.	Low-noise equipment – see examples	
	d.	Noise & vibration control equipment – see examples	
	e.	Noise attenuation – see examples	

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
		/ or vibration issues and any appropriate management techniques that may be required in order to control such emissions.
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
	b.	Water recirculation
	c.	Impermeable surface
	d.	Reduce likelihood and impact of tank/vessel overflows and failures – see examples
		Currently Compliant: Operator has stated that mains water is used on site in the steam boiler. All condensate on site is collected and returned to the boiler via a hot well for reuse. Document Reference: P&ID drawings NPT-PID-160, NPT-PID-161 and NPT-PID-162.
		Not Applicable: Apart from the steam boiler system (see previous), there are no other large users of water on site.
		Currently Compliant: Operator has confirmed that all waste process areas are serviced with concreted and impervious surfacing. Tanks are all within adequately sized bunded areas. Main site yard is bunded, with the site drains passing through a penstock valve prior to discharge.
		Currently Compliant: Operator has confirmed that large tanks on site are fitted with visual level gauges, which are monitored and checked by plant operators. All tank overflow pipes are diverted into bunds. Formal weekly site checks, including primary and secondary containment. Informal checks of containment bunds during routine day to day activities. Tank routing valves are all within the bund. Site bunds meet the volume containment criteria required. Historic third-party assessments and most current bund calculations are available on site for inspection by the local Site Officer.

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
	e.	Roofing of waste storage and treatment areas	Compliant in Future: Operator has confirmed that all liquid storage tanks have roofs, with minimal openings (small nozzles) for venting. Storage of lead acid batteries is in a lockable (locked out of hours) warehouse / shed building. Storage of aerosols (cut to IBCs) is in an aerosol case that has a roof. Majority of garage wastes are delivered and stored on site in either clip top drums or wheelie bins that have lids. Site visual inspections of wheelie bins and drums ensures damaged units are removed from circulation for disposal. Slicker is to review the use of roofing across site and implement upgrades or changes in areas where it is required or deemed necessary. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC16)
	f.	Segregation of water streams (being mindful of existing plant constraints)	Currently Compliant: Operator has confirmed that site water / effluent is handled through a number of tanks. Please refer to site P&ID drawings NPT-PID-120 through to NPT-PID-137. Tank E1 used solely for discharge of effluent to the V-notch weir.
	g.	Adequate drainage infrastructure	Currently Compliant: Operator has confirmed that site has adequate drainage system installed with interceptors and a penstock valve. See drawing 10435/1 dated 16th Aug 2007
	h.	Design and maintenance provisions to allow risk-based leak detection and repair. Minimise use of underground components.	Compliant in future: Operator has confirmed that all process pipework containing chemicals and wastes are located in pipe racks or through bunded areas above the ground. A small covered / underground channel exists between the 'water bund' and the 'washing machine shed', which contains towns water pipes, electrical cables and compressed air lines, with no chemical or waste pipes running in the channel. All bund low points are fitted with an 'uplift point' into pipes that run in pipe racks. Site has a drainage system installed with interceptors and a penstock valve. The drawing also has locations of all historic site investigation boreholes

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
			identified (note: these are not extraction boreholes). See drawing 10435/1 dated 16th Aug 2007. Slicker Recycling to review and improve monitoring and inspection of sewers and site investigation boreholes. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC16)
	i.	Appropriate buffer storage capacity (being mindful of existing plant constraints)	Currently Compliant Refer to information provided against BREF BAT Conclusion 4 above
20	Treat wastewater using a combination of:		
	Preliminary, primary and general treatment		
	a.	Equalisation	Compliant in future: The Operator has not provided sufficient information to demonstrate compliance with this BAT conclusion . An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC17)
	b.	Neutralisation	
	c.	Physical separation	
	Physico-chemical treatment		
	d.	Adsorption	Compliant in future: The Operator has not provided sufficient information to demonstrate compliance with this BAT conclusion . An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC17)
	e.	Distillation/rectification	
	f.	Precipitation	
	g.	Chemical oxidation	
	h.	Chemical reduction	
	i.	Evaporation	
	j.	Ion exchange	
	k.	Stripping	
	Biological treatment		

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
	l.	Activated sludge process	Not applicable Operator has stated N/a within response there is no activated sludge treatment of wastewater undertaken at the Facility
	m.	Membrane bioreactor	Not applicable Operator has stated N/a within response there is no membrane bioreactor 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 nitrogen removal treatment of wastewater from the Facility
	Solids removal		
	o.	Coagulation and flocculation	Not applicable Operator has stated N/a within response there is no solids treatment of wastewater from the Facility
	p.	Sedimentation	
	q.	Filtration (sand, micro, ultra)	
	r.	Flotation	
	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 do not give rise to direct discharge run-off containing these parameters
	COD (TOC is preferred)	30-180 30-300 for water-based liquid waste	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	Suspended solids	5.0-60	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters

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
	HOI	0.5-10 applying to specific waste treatments	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	Total N	1-25 for biological treatment and waste oil re-refining 10-60 for water-based liquid waste	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	Total P	0.3-2 for biological treatment 1-3 for water-based liquid waste	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	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 do not give rise to direct discharge run-off containing these parameters
	Free CN-	0.02-0.1 for water-based liquid waste	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	AOX	0.2-1 for water-based liquid waste	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	Metals & Metalloids – specific waste treatments as listed in Table 6.1		Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	As	0.01-0.05	
	Cd	0.01-0.05	
	Cr	0.01-0.15	
	Cu	0.05-0.5	
	Pb	0.05-0.1	
	Ni	0.05-0.5	
	Hg	0.5-5	
	Zn	0.1-1	
	Metals & Metalloids – treatment of water-based liquid waste		

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
	As	0.01-0.1	Not applicable Permitted activities do not give rise to direct discharge run-off containing these parameters
	Cd	0.01-0.1	
	Cr	0.01-0.3	
	Hexavalent Cr [Cr(VI)]	0.01-0.1	
	Cu	0.05-0.5	
	Pb	0.05-0.3	
	Ni	0.05-1	
	Hg	1.0-10	
	Zn	0.1-2	
	BAT-AELs for INDIRECT discharges to a receiving waterbody (mg/l) <i>Table 6.2 and its supporting notes. Monitoring requirements are outlined in BAT 7</i>		
HOI	0.5-10 applying to specific waste treatments	Compliant in Future: Operator has stated HOI not currently listed within TEC. The monitoring frequency may be reduced if the downstream wastewater treatment plant abates the pollutants concerned. The BAT-AELs may also not apply if the downstream wastewater treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC17)	

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
	Free CN-	0.02-0.1 for water-based liquid waste	Not applicable Site does not process water-based liquid waste
	AOX	0.2-1 for water-based liquid waste	Not applicable Site does not process water-based liquid waste
	Metals & Metalloids – specific waste treatments as listed in Table 6.2		Compliant in Future: Operator has stated not all metals & metalloids as listed within the BAT conclusion are currently listed within TEC or monitored on site. Operator has indicated one off samples will be taken to confirm exactly which parameters are present in effluent. The monitoring frequency may be reduced if the downstream wastewater treatment plant abates the pollutants concerned. The BAT-AELs may also not apply if the downstream wastewater treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC17)
	As	0.01-0.05	
	Cd	0.01-0.05	
	Cr	0.01-0.15	
	Cu	0.05-0.5	
	Pb	0.05-0.1	
	Ni	0.05-0.5	
	Hg	0.5-5	
	Zn	0.1-1	
	Metals & Metalloids – treatment of water-based liquid waste		Not applicable Operator has confirmed site does not undertake treatment of water-based liquid wastes
	As	0.01-0.1	
	Cd	0.01-0.1	
	Cr	0.01-0.3	
	Hexavalent Cr [Cr(VI)]	0.01-0.1	

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
	Cu	0.05-0.5	
	Pb	0.05-0.3	
	Ni	0.05-1	
	Hg	1.0-10	
	Zn	0.1-2	
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. Slicker Recycling Limited maintain appropriate accident management plans for all of their sites including the Newport site. Protection measures are in place such as the use of trained staff, operating procedures and dedicated drainage systems directing run-off to collection points or interceptors with penstock valves. Trained staff, the presence of site spill kits and emergency procedures result in the appropriate management of incidental or accidental emissions. All accidents, incidents, dangerous occurrences or near misses must be reported to the person within the Company that is responsible for Health and Safety and is also reported to the Board by way of the monthly report. As necessary, incidents are also reported to Natural Resources Wales, immediately using the telephone, and subsequently using the Schedule 6 notification form
	b.	Management of incidental or accidental emissions	
	c.	Incident/accident registration and assessment system – see examples	
MATERIAL EFFICIENCY			

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
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 that as a waste recycling site, the fundamental principles of the site operation are consistent with this requirement. However, the site also uses recycled containers where possible, such as drums and IBCs which may be used repeatedly from their original purpose, until such time as they are no longer fit for purpose
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 currently in place, however the Operator has committed to producing and maintaining an EEP and EBR prior to compliance deadline. NRW will include an Improvement Condition to ensure site implements these measures before compliance date. (IC18)
	b.	Energy balance record	Compliant in Future Operator has stated that the site does not have an Energy Efficiency Plan or Energy Balance Record currently in place, however the Operator has committed to producing and maintaining an EEP and EBR prior to compliance deadline. NRW will include an Improvement Condition to ensure site implements these measures before compliance date. (IC18)
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 Operator has requested the permit is varied to include a wash facility as part of the WT BREF review/permit variation, with full consideration of maximisation of the reuse of packaging conditioned as an improvement programme condition. This falls outside the scope of this permit review. If the Operator wishes to add this activity to the permit a formal variation will need to be applied to incorporate any new activity. NRW will include an Improvement Condition to ensure site implements a Residues Management Plan before compliance date. (IC19)
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 The only mechanical treatment of waste undertaken at the site is drum crushing (DAA). Drums are nominally empty, do not contain dusty materials and can be left lidded during crushing, with the base being pieced prior to crushing. Therefore, there are no diffuse dust emissions created by the crush activity and no requirement for channelled emissions to air or extraction / abatement measures required.
	b.	Fabric filter – see S6.1	
	c.	Wet scrubbing – see S6.1	
	d.	Water injection into the shredder	
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	As above

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 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
	(b)	Remove dangerous items from waste inputs and dispose of them in a safe manner
	(c)	Treatment of containers accompanied by a declaration of cleanliness
Not applicable Although the Operator has provided details of procedures against this BAT, the operator has also stated there is currently no shredding of waste which takes place on site therefore BATc 26 is not currently applicable		
27	Prevent deflagrations and reduce emissions from deflagrations. Use technique a. <u>AND ONE OR BOTH</u> of techniques b. and c.	
	a.	Deflagration management plan with reduction programme, incident review and response protocol
	b.	Pressure relief dampers
	c.	Pre-shredding (device)
Not applicable Operator has stated there is currently no shredding of waste which takes place on site. However, this is likely to take place in future. Operator has requested the permit is varied to include this activity as part of the WT BREF review/permit variation, with full consideration to prevention of deflagrations conditioned as an improvement programme condition. This falls outside the scope of this permit review. If the Operator wishes to add this activity to the permit a formal variation will need to be applied to incorporate any new activity		
28	Use energy efficiently by keeping the shredder feed stable	
Not applicable Operator has stated there is currently no shredding of waste which takes place 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
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	
	c.	Adsorption	
	BAT-AELs for channelled TVOC and CFC emissions to air from treatment of WEEE containing VFCs and/or VHCs (mg/Nm3) Table 6.4. Monitoring requirements are outlined in BAT 8		
	TVOC	3.0-15	As above
	CFCs	0.5-10	
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	
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
	b.	Biofilter – see S6.1	
	c.	Thermal oxidation – see S6.1	
	d.	Wet scrubbing – see S6.1	

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-AEL for channelled TVOC emissions to air from the mechanical treatment of waste with calorific value (mg/Nm3) Table 6.5 and its supporting note. Monitoring requirements are outlined in BAT 8			
TVOC		10.0-30.0	As above
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		
	Monitoring of waste gas treatment efficiency		
	Mercury levels measured at least weekly within treatment and storage areas		
	BAT-AEL for channelled mercury (Hg) emissions to air from the mechanical treatment of WEEE containing mercury (µg/Nm3) Table 6.6. Monitoring requirements are outlined in BAT 8		
Hg		2.0-7.0	As above
BIOLOGICAL TREATMENT OF WASTE (GENERAL BAT)			

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
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	
	c.	Fabric filter – see S6.1.	
	d.	Thermal oxidation – see S6.1	
	e.	Wet scrubbing – see S6.1	
	BAT-AEL for channelled NH3, odour, dust and TVOC emissions to air from the biological treatment of waste (mg/Nm3) (ouE/m3) Table 6.7 and its supporting notes. Monitoring requirements are outlined in BAT 8		
	NH3	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	
	Dust	2.0-5.0	
	TVOC	5.0-40	
35	Reduce the generation of wastewater and reduce water usage by using ALL of the following:		
	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	
	c.	Minimisation of the generation of leachate	
BIOLOGICAL TREATMENT OF WASTE: AEROBIC METHODS			

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	
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)				
	Aeration of the windrow				
	Windrow porosity, height and width				
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			
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:				
	Implement a manual and/or automatic monitoring system to:				
	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				
	Provide sufficient early warning of system failures				

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 anaerobic methods of waste undertaken at the Facility
	Monitoring and/or control of key waste and process parameters – examples below:		
	pH and alkalinity of the digester feed		
	Digester operating temperature		
	Hydraulic and organic loading rates of the digester feed		
	Volatile fatty acids and NH3 concentrations within digester & digestate		
	Biogas quantity, composition (e.g. H2S) and pressure		
	Liquid and foam levels in the digester		
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:		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
	a.	Segregation of the waste gas streams (refer to inventory described in BAT 3)	
	b.	Recirculation of waste gas. Waste gas treatment is described in BAT 34 and recirculation in BAT 35.	
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.		
	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
	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		
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:		
	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	
	c.	Fabric filter – see S6.1.	
	d.	Wet scrubbing – see S6.1	
	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)		
	Table 6.8. Monitoring requirements are outlined in BAT 8		
Dust	2.0-5.0	As above	
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		
	Chlorinated compounds e.g. solvents or PCBs		Currently Compliant: Operator has stated all waste oil is checked against the 'Third Party ULO Acceptance Specification' (Rev.C - 26th May 2020) before offloading. Criteria is based on physical and chemical properties, as well as a restricted set of EWC codes, which

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
		includes testing for chlorides. Analysis is stapled to the respective waste consignment note and weighbridge slip. Key internal parameters are reported in the site 'ins and outs' to a wider audience (off site). It is very rare for the site to handle electrical insulating oils, but if booked onto the system, Slicker Recycling do request a pre-acceptance sample or a PCB free certificate.
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
	b.	Energy recovery
		Currently Compliant The site processes comprise of simple heating and dewatering rather than complex physico-chemical treatment measures. As such, there are no organic residues from vacuum distillation, solvent extraction, thin film evaporators etc, and all of the separated oil is transferred from site for further processing. However, the on-site treatment does result in a reduction in the volumes of waste oil being transported from the site for full treatment, with the removed water phase being treated on site and discharged to sewer. Where possible, other wastes are re-used, such as IBCs and drums, although most incoming waste to the site is destined for off-site recycling.
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
	b.	Thermal oxidation – see S6.1
	c.	Wet scrubbing – see S6.1
		Compliant in Future Operator has advised existing tanks & processes currently does not have abatement measures for existing discharge points to atmosphere. Operator has committed to assessing most appropriate technique for abatement and will adopt and install prior to compliance deadline. An Improvement Condition has been included within permit variation to ensure compliance prior to compliance deadline (IC20)

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
	The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies. Monitoring requirements are outlined in BAT 8		
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
	b.	Cryogenic condensation – see S6.1	
	c.	Thermal oxidation – see S6.1	
	d.	Wet scrubbing – see S6.1	
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	
47	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using a <u>combination</u> of 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
	b.	Adsorption – see S6.1	

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.	Thermal oxidation – see S6.1. Avoid generating PCBs and/or PCDD/Fs	
	d.	Condensation or cryogenic condensation	
	e.	Wet scrubbing – see S6.1	
	The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies. Monitoring requirements are outlined in BAT 8		
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)			
	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) Table 6.9 and its supporting note. Monitoring requirements are outlined in BAT 8		
	TVOC	5.0-30	As above
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 their response that there are no activities involving the thermal treatment of spent activated

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.	Indirectly fired furnace i.e. avoids contact between the furnace contents and the burner flue-gases. Note applicability constraints.	carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	c.	Process-integrated techniques to reduce emissions to air – see examples	
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:		Not applicable Operator has confirmed within their response that there are no activities involving the thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil undertaken at the Facility
	a.	Cyclone – see S6.1	
	b.	Electrostatic precipitator (ESP) – see S6.1	
	c.	Fabric filter – see S6.1	
	d.	Wet scrubbing – see S6.1	
	e.	Adsorption – see S6.1	
	f.	Condensation – see S6.1	
	g.	Thermal oxidation – see S6.1	
Note supporting text for BAT 49g (thermal oxidation) Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.			
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	
	b.	Fabric filter – see S6.1	

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.	Wet scrubbing – see S6.1	Not applicable Operator has confirmed within response that 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
	b.	Implementation of staff access rules to prevent dispersion of contamination – see examples	
	c.	Optimised equipment cleaning and drainage – see examples	
	d.	Control and monitoring of emission to air – see examples	
	e.	Disposal of waste treatment residues – see examples	
	f.	Recovery of solvent when solvent washing is used	
	Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.		
TREATMENT OF WATER-BASED LIQUID WASTE			

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
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		
	Bioeliminability e.g. BOD, BOD-COD ratio, Zahn-Wellens test, biological inhibition potential	Not applicable Operator has confirmed within response there are no water-based liquid wastes accepted at the Facility. All wastes accepted are oil based and do not fit the definition of water-based liquid waste (Water-based liquid waste - Waste consisting of aqueous liquids, acids/alkalis or pumpable sludges (e.g. waste acids, aqueous marine waste) which is not liquid biodegradable waste).	
	Feasibility of emulsion breaking e.g. lab testing		
53	Reduce emissions to air of HCl, NH3 and organic compounds by applying BAT 14d AND 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	
	c.	Thermal oxidation – see S6.1.	
	d.	Wet scrubbing – see S6.1	
	BAT-AELs for channelled HCl and TVOC emissions to air from the treatment of water-based liquid waste (mg/Nm3) Table 6.10 and its supporting notes. Monitoring requirements are outlined in BAT 8		
	HCl	1.0-5.0	As above
TVOC	3.0-20		