

Natural Resources Wales permitting decisions

Variation and Consolidation of a bespoke Permit – J Reid Trading Limited

We have decided to issue Natural Resources Wales initiated variation for Refrigerant Transfer Operation Sandycroft in Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ operated by J Reid Trading Limited.

The permit number is EPR/MP3531MD.

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

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

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

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

Purpose of this document

This decision document:

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

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

Structure of this document

- Assessment of Refrigerant Transfer Operation Sandycroft against the published BAT conclusions for Waste Treatment.
- Annex 1 – Decision Checklist regarding relevant BAT Conclusions

Assessment of Refrigerant Transfer Operation Sandycroft against the published BAT conclusions for Waste Treatment

1. Our decision

We have issued a variation, which will allow J Reid Trading Limited to operate the installation, subject to the conditions in the varied permit.

The variation does three things:

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

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

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

The original permit, issued on the 22 February 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 standard by 17 August 2022.

2. The legal framework

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

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

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

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

3. How we reached our decision

Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 on 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, J Reid Trading Limited 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. J Reid Trading Limited have updated their risk assessment and the risks of groundwater or soil contamination have been assessed by the operator as insignificant and therefore a baseline report is not required.
- Where their permitted activity involves the use, production, storage or release of a priority hazardous substances and any other relevant substances, as defined by the Water Framework Directive, J Reid Trading Limited 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. J Reid Trading Limited have confirmed that there are no discharges to surface water and/or sewer from the permitted site. Clean uncontaminated rainwater run off drains through an interceptor to a soakaway to ground.

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 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 27 September 2019 and additional information received on the 13 March 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 a 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 detailed response was received from J Reid Trading Limited. Following assessment of the Regulation 61(1) response, further information was requested from J Reid Trading Limited. 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.

5. Changes we have made

Improvement Conditions

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

Reference	Requirement	Date
IC9	The operator shall submit to Natural Resources Wales a written procedure(s) describing how they intend to meet the following BAT requirements in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018): BAT 1 vii Following the development of cleaner technologies BAT 1 ix Regular sectoral benchmarking BAT 1 xii Residues management plan	17th February 2022 or otherwise agreed in writing with Natural Resources Wales
IC10	The operator shall submit to Natural Resources Wales a written procedure(s) describing how they intend to meet the following BAT requirements in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relating to: BAT 2 a) Waste characterisation and pre-acceptance procedures	17th February 2022 or otherwise agreed in writing with Natural

	BAT 2 c) Implementation of a waste tracking system and inventory BAT 2 d) Output quality management system BAT 2 e) Ensure waste segregation BAT 2 f) Ensure waste compatibility prior to mixing or blending	Resources Wales
IC11	The operator shall submit to Natural Resources Wales a written procedure(s) in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to: BAT 3 i)b) information on the process-integrated and waste water/waste gas treatment descriptions including performance (in particular the performance of the distillation process) BAT 3 iii) Information on the characteristics of the waste gas stream from the venting of air gases and distillation process.	17th February 2022 or otherwise agreed in writing with Natural Resources Wales
IC12	The operator shall submit to Natural Resources Wales a written procedure(s) in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to: BAT 4 a) Adequate storage capacity	17th February 2022 or otherwise agreed in writing with Natural Resources Wales
IC13	The operator shall submit to Natural Resources Wales a written procedure(s) in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to: BAT 14 a) Minimising potential diffuse emissions sources BAT 14 b) Selection and use of high-integrity equipment BAT 14 c) Corrosion prevention BAT 14 d) Containment, collection and treatment of diffuse emissions BAT 14 e) Dampening BAT 14 f) Maintenance BAT 14 g) Cleaning of waste treatment and storage areas BAT 14 h) Leak detection and repair programme for organics requiring the use of one or a combination of the above techniques.	17th February 2022 or otherwise agreed in writing with Natural Resources Wales
IC14	The operator shall submit to Natural Resources Wales information in order to evidence compliance with BAT Conclusion 19 of the Waste Treatment BRef Document (EU 2018).	17th February 2022 or otherwise agreed in writing with Natural Resources Wales
IC15	The operator shall submit to Natural Resources Wales a written procedure(s) in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to:	17th February 2022 or otherwise

	BAT 21 a) Protection measures (particularly in relation to fire and explosion protection and accessibility and operability in emergency situations)	agreed in writing with Natural Resources Wales
IC16	The operator shall submit to Natural Resources Wales written procedure(s) (including updates to existing procedures) in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to: BAT 24 – Residue Management Plan This shall include information on how the reuse of packaging is maximised and how the quantity of waste sent for disposal is reduced.	17th February 2022 or otherwise agreed in writing with Natural Resources Wales

Operational Changes

There are no Operational changes as part of the variation, however the following existing operations are added to the permit.

It is understood that the existing boiler for the distillation process added and previously assessed as part of V003, is likely less than 1MWth and will therefore fall outside of the scope of MCPD (where ELVs and monitoring for existing MCPs and SGs would be required but not until 1st January 2025 at the earliest). This information should be reviewed in the future and if the boiler is found to have a rated thermal input of 1MWth or more then it will need to be regulated under EPR16 by the appropriate date. As this is some way off, we have not reviewed this information in detail at this time.

The V002 permit variation notes the facility “has two soakaways and surface water drains that run to an interceptor which discharges to a third soakaway or can pumped out for off-site disposal”. The operator has confirmed that there is one soakaway located adjacent to the distillation process and that there are five surface water drains and a roof water drain that drain to the interceptor and onto the soakaway. The operator has confirmed that the soakaway is only used to drain uncontaminated rain water. The existing soakaway at the site has been added to table S3.2 for completeness.

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 was required to carry 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 specific BAT Conclusions on water emissions were also reviewed based on the Waste Treatment BREF and no changes have been made to the ELV’s for emissions to water taking into account BAT Conclusion 20 from the BREF.

There are no emissions to water or sewer of process water associated with the permitted activity and therefore a H1 screen was not carried out and no ELVs for emissions to sewer or water have been added to the permit. Only clean uncontaminated surface/rain water runoff is discharge to a soakaway.

Emissions to Water – Article 15(4) Derogations

No derogations

Emissions to Air

There are no point source emissions to air associated with the permitted activity other than the existing venting of inert air gases to air added in V002 and existing pressure relief valves associated with the existing distillation process added in V003 which do not require the setting of ELVs and any emissions from the existing boiler added in V003 to heat the distillation process, which fall outside of the scope of the Waste Treatment BREF (and where relevant, will need to be regulated under EPR16 by the appropriate date as Medium Combustion Plant). The emissions to air from the existing venting of air gases, distillation process pressure relief valves and existing boiler have been added to the emissions to air table S3.1, but no limits set.

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, and that the operator has achieved improvements in performance since the permit was originally granted. The revised BREF and its BAT-AELs provide the opportunity to consider further environmental improvements and improvement conditions have been set as detailed above.

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 a Commission Implementing Decision ((EU 2018/1147) in the Official Journal of the EU on 10 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 The operator has stated that an EMS is in place with an environmental policy signed by senior management (referenced document EMS-JRT-01r4).
	II. Environmental policy development including CI of performance	Currently compliant The operator has stated that an environmental policy is in place with a commitment to continuous improvement (referenced document EP-JRTr2).

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	III.	Planning and implementing procedures & targets in conjunction with financial planning & investment	Currently compliant The operator has stated that environmental objectives have been set in accordance with the EMS and that planning requirements including risks and opportunities are identified in section 6 of the EMS (referenced document EMS-JRT-01r4).
	IV.	Implementation of procedures	
		(a) Structure & responsibility	Currently compliant The operator has stated that structure, roles and responsibilities are detailed in section 5.3 of the EMS (referenced document EMS-JRT-01r4).
		(b) Recruitment, training, awareness & competence	Currently compliant The operator has stated that recruitment is covered in section 7.1 Resources, of the EMS (noting it is not deemed necessary to have a fully developed recruitment policy and procedure due to the small size of the organisation) and that training, awareness and competence are covered in sections 7.2 and 7.3 of the EMS (referenced document EMS-JRT-01r4).
		(c) Communication	Currently compliant The operator has stated that the communication is covered in section 7.4 of the EMS (referenced document EMS-JRT-01r4).
		(d) Employee involvement	Currently compliant The operator has stated that employee involvement is covered in sections: 9.2 Internal Audit, 9.3 Management Review, and 10 Improvement, of the EMS (referenced document EMS-JRT-01r4).

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) Documentation	Currently compliant The operator has indicated that documentation is covered in document reference DR-JRT-01.
		(f) Effective process control	Currently compliant The operator has stated that process control is overviewed in section 8 of the EMS and detailed in the site operations document, that gives a breakdown of each of the processes undertaken on site (referenced document EMS-JRT-01r4 and SO-JRT-01).
		(g) Maintenance programmes	Currently compliant The operator has stated that maintenance is controlled within the EMS using a maintenance programme (referenced document MP-JRT-01).
		(h) Emergency preparedness & response	Currently compliant The operator has stated that emergency procedures exist to guide personnel in the event of an incident. Personnel are trained and procedures reviewed as part of the training register (referenced document EP-001, EP-002, EP-003).
		(i) Safeguarding compliance with environmental legislation	Currently compliant The operator has stated that the waste manager is responsible for keeping up to date with current legislation. This is reviewed as part of the management review process (referenced document Management Review 2019).
	V.	Checking performance and taking corrective action	
		(a) Monitoring & measurement	Currently compliant

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 operator has stated that monitoring and measurement is detailed in section 9.1 of the EMS. This also reflects the permit requirements (referenced document EMS-JRT-01r4).
		(b) Corrective and preventive action	Currently compliant The operator has stated that corrective and preventive actions are managed through the non-conformity process detailed in section 10.2 of the EMS (referenced document EMS-JRT-01r4).
		(c) Maintenance of records	Currently compliant The operator has stated that maintenance of records is covered in section 7.5 of the EMS (referenced document EMS-JRT-01r4).
		(d) Independent (where practicable) internal or external EMS auditing	Currently compliant The operator has stated that Internal audit is completed in accordance with section 9.2 of the EMS and the internal audit programme (referenced document EMS-JRT-01r4 and IAP-JRT-01). No external auditing is performed.
	VI.	Senior management review of EMS	Currently compliant The operator has stated that a management review document is in place and section 9.3 of EMS (referenced document Management Review 2019).
	VII.	Following development of cleaner technologies	Compliant in future The operator has stated that no cleaner technologies have been identified in waste transfer operation. This response does not indicate there is a procedure in place to monitor development of

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
			cleaner technologies and an improvement condition has been set to add this to the EMS.
	VIII.	Whole life cycle considerations when designing a new plant i.e. impacts from eventual decommissioning and throughout its operating life	Currently compliant The operator has stated that new plant is discussed as part of the opportunities section of the management review and that any permit variation for new plant will include life cycle considerations (referenced document Management Review 2019).
	IX.	Regular sectoral bench marking	Compliant in future The operator has stated that they are not aware of any sectoral benchmarking. An improvement condition has been added to update the EMS to include a procedure to research and/or review sectoral bench marking periodically.
	X.	Waste stream management (BAT 2)	Currently compliant The operator has stated that the waste streams are detailed in the site operations register (referenced document SOR-JRT-01) and that waste management control procedures are in place as referenced in BAT 2 section (though it should be noted that these require updating in line with BAT 2 requirements).
	XI.	Inventory of waste water & waste gas streams (BAT 3)	Not applicable The operator has stated that there are no waste water stream or waste gas stream detailed in the site operations register (referenced document SOR-JRT-01). Details given in BAT3 section below which include reference to venting of air gases.
	XII.	Residues Management Plan – S6.5	Compliant in future

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 operator has stated that there are no waste residues identified in the site operations register (referenced document RMP-JRT-01) and there is no plan in place. This is contradictory to the response to BAT 24 which indicates a residues management plan is in place. Further information is required, and an improvement condition has been set.
	XIII.	Accident Management Plan – S6.5	Currently compliant The operator has stated that there is an Accident Management Plan in place (referenced document AMP-JRT-01r4)
	XIV.	Odour Management Plan (BAT 12)	Not applicable The operator has stated that an odour risk assessment was completed with no significant risks identified. No plan in place.
	XV.	Noise & Vibration Management Plan (BAT 17)	Not applicable The operator has stated that a noise and vibration assessment was completed with no significant risks identified. No plan in place.
2	Improving overall environmental performance – <u>ALL</u> of the following:		
	a.	Set up and implement waste characterisation & pre-acceptance procedures	Compliant in future The operator has stated that a procedure is in place for pre-acceptance (referenced document WTO-WP01r4) but this does not include for analysing cylinders for waste characterisation where the contents of the gas cylinder are known by the markation/colouring on the cylinder. However, the operator has stated sample testing of standard products on an annual basis will be introduced to verify the

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
		constituents of these products as part of a pre-acceptance review. An improvement condition has been set.
	b.	Set up and implement waste acceptance procedures
	c.	Set up and implement a waste tracking system & inventory
	d.	Set up and implement an output quality management system
	e.	Ensure waste segregation
		Currently compliant The operator has stated that a procedure is in place for waste acceptance (referenced document WTO-WP02r4).
		Compliant in future The operator has stated that a procedure is in place for waste storage (referenced document WTO-WP03r4) and that a computerised waste tracking system will be developed. An improvement condition has been set.
		Compliant in future The operator has stated that this is not a distinct part of the EMS, due to the facility being a transfer station and the limited number of waste outputs. This will be reviewed as part of the next EMS review cycle and implemented. It is noted that there is a distillation process DAA which will produce outputs. An improvement condition has been set.
		Compliant in future The operator has stated that waste is segregated in accordance with the site plan, to keep incompatible materials separate from each other (referenced drawing CGS-DWG-016G). A procedure should be developed to ensure waste is segregated and stored accordingly identifying when and where wastes are stored, and when the mixing

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
			of waste is allowed and how it is carried out. An improvement condition has been set.
	f.	Ensure waste compatibility prior to mixing or blending	Compliant in future The operator has stated that a waste compatibility register for material blended into the tank is provided based on previous experience and chemical knowledge (referenced document WCOMP-01r5). No compatibility testing is undertaken. A full review of waste compatibility will be completed using a risk-based approach, to determine if any testing is required for existing products. New products shall have compatibility testing completed prior to transfer from the drums to the tanks. An improvement condition has been set.
	g.	Sort solid incoming waste – S6.4	Not applicable No solid waste sorting is required as wastes are gases/liquified gases and the containers they arrive in and no treatment of solid waste is undertaken.
3	Establish and maintain a waste water and waste gas inventory as part of the EMS - <u>ALL</u> of the following:		
	Information on characteristics of waste and waste treatment processes		
	(i)(a)	simplified process flow sheets showing emission sources	Currently compliant The operator has stated that there is a flowsheet detailing the different operations with the emission sources shown (referenced document ESF-JRT-01r1)
	(i)(b)	Process-integrated and waste water/waste gas treatment descriptions including performance	Compliant in future

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 operator has stated that there are no waste water or waste gas treatment as there are no waste water streams and waste gas sources are inert/atmospheric gases. It is noted that there is a DAA for a distillation process on site that is used to recover HCFCs, HFCs and HCs. A description of this process was provided for V003 of the permit though this does not include performance information. An improvement condition has been set.
Information on characteristics of waste water streams			
(ii)(a)		<i>Mean and variability of:</i>	
		Flow	<i>Not applicable</i> There are no waste water streams.
		pH	As above
		Temperature	As above
		Conductivity	As above
(ii)(b)		<i>Mean concentration, load and variability of:</i>	
		Total suspended solids	<i>Not applicable</i> There are no waste water streams.
		COD/TOC	As above
		Nitrogen species	As above
		Phosphorous	As above
		Metals	As above
		Priority substances/micropollutants	As above
		Any other relevant compounds	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
	(ii)(c)	<i>Bioeliminability data (see BAT 52):</i>	
		BOD	<i>Not applicable</i> There are no waste water streams.
		BOD to COD ratio	As above
		Zahn-Wellens test	As above
		Biological inhibition potential	As above
	Information on characteristics of waste gas streams		
	(iii)(a)	<i>Mean and variability of:</i>	
		Flow	Compliant in future The operator has stated that small quantity venting of inert/atmospheric gases occurs but there are no standard flow characteristics. The venting is batchwise dependent on the waste received. The operator has confirmed this waste gas stream will be assessed and relevant information will be provided by 2022. Information is also required on the waste gas streams being recovered in the distillation process, although it is understood from information previously supplied for EPR/MP3531MDV003 that there are no point source emissions from this process only emergency pressure relief valves. An improvement condition has been set.
		temperature	Compliant in future As above although the operator has stated that the temperature is atmospheric.
	(iii)(b)	<i>Mean concentration, load and variability of relevant substances:</i>	

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		Organic compounds	Compliant in future The waste gas streams will be assessed, and relevant information will be provided by 2022. An improvement condition has been set.
		POPs e.g. PCBs	Compliant in future As above although the operator has indicated the waste gas stream from venting contains no POPs.
		Any other relevant compounds	Compliant in future As above although the operator has indicated the waste gas stream from venting contains no other relevant compounds.
	(iii)(c)	Flammability	Compliant in future The waste gas streams will be assessed, and relevant information will be provided by 2022 although the operator has indicated the waste gas stream from venting is not flammable. An improvement condition has been set.
		Lower and Higher Explosive Limits	Compliant in future As above although the operator has indicated the waste gas stream from venting is not explosive.
		Reactivity	Compliant in future As above although the operator has indicated the waste gas stream from venting is not reactive.
	(iii)(d)	<i>Presence of other substances that may affect the gas treatment system or plant safety:</i>	
		O2	Compliant in future

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 operator has indicated there is no waste gas treatment system and the emissions are atmospheric or inert products. As noted above there is a DAA for distillation and an improvement condition has therefore been set.
		N2	<i>Compliant in future</i> As above.
		Water vapour	<i>Compliant in future</i> As above.
		Dust	<i>Compliant in future</i> As above.
4	Reducing environmental risk associated with waste storage – <u>ALL</u> of the following:		
	a.	Optimised storage location	<i>Currently compliant</i> The applicability of this technique is limited as the site is operational and has been for many years, but the operator has stated that the storage location has been optimised to minimise unnecessary handling (referenced document CGS-DWG-016G)
	b.	Adequate storage capacity	<i>Compliant in future</i> The operator has stated that storage limits are set in the waste storage procedure together with residence times and monitoring requirements but that full compliance with BAT has not been achieved but will be in the future (referenced document WTO-WP03r4). An improvement condition has been set.
	c.	Safe storage operation	<i>Currently compliant</i>

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			The operator has stated that equipment used for loading/unloading is documented in the storage procedure and that no sensitive waste has been identified (referenced document WTO-WP03r4). It was not clear from the operator's initial response if containers and drums are considered fit for purpose and stored securely. Further information has been requested and provided by the operator to indicate containers and drums used are fit for purpose and stored securely. The operator has indicated that the pressure drums or cylinders are designed in accordance with either national standards, for old pressure receptacles, or to the TPED for new European specification pressure drums. These are subject to a period test which is the responsibility of the owner. These are checked for damaged and suitability as part of the acceptance procedure. There is no requirement to receive an in-test receptacle, providing the out of test receptacle is being returned as part of the cycle for testing, which includes product removal prior to either retest or disposal. Pressure drums are either stored in frames or are positioned individually in a row and stacked using chocks to secure. For cylinders, these are typically stored in pallets or cages.
	d.	Separate area for storage & handling of packaged hazardous waste	Currently compliant The operator has stated that hazardous waste storage is demarked on the site storage drawing (referenced document CGS-DWG-016G). There is a secure storage area for 'high consequence products' noted on the permit site plan.

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
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 The operator has stated that there is a Training Register detailing the necessary requirements and competencies for the staff (referenced document TR-JRT-01).
	Duly documented, validated and verified	Currently compliant The operator has stated that procedures are in place for each stage of the processing which document, validate and verify movements of wastes (referenced documents WTO-WP02r4, WTO-WP03r4, WTO-WP04r4, WTO-WP05r4).
	Spill prevention, detection and mitigation measures	Currently compliant The operator has stated that spill prevention is covered in the Environmental Risk Assessments and control measures are actioned in several procedures (referenced documents ERAr4 Soil Groundwater, WTO-WP02r4, WTO-WP03r4, WTO-WP04r4, WTO-WP05r4).
	Take precautions when mixing or blending wastes	Currently compliant The operator has stated that blending of wastes is covered in the waste operating procedure (referenced document WTO-WP04r4).
	Procedures are risk-based and consider likelihood of accidents, incidents and their environmental impact	
MONITORING		

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
6	Relevant emissions to water: monitor key process parameters at key locations	
	Key process parameters	
	Waste water flow	<i>Not applicable</i> There are no waste water streams.
	pH	<i>Not applicable</i> As above.
	Temperature	<i>Not applicable</i> As above.
	Conductivity	<i>Not applicable</i> As above.
	BOD	<i>Not applicable</i> As above.
	Other process parameters	<i>Not applicable</i> As above.
	Key monitoring locations	
	Pre-treatment inlet and/or outlet	<i>Not applicable</i> There are no waste water streams.
	Final treatment inlet	<i>Not applicable</i> As above.
	Discharge point (to the environment)	<i>Not applicable</i> As above.
	Other location	<i>Not applicable</i> 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
7	Monitoring emissions to water (refer to table) Monitoring parameters depend on waste treatment process(es) involved	<i>Not applicable</i> There are no waste water streams.
8	Monitoring emissions to air (refer to table) Monitoring parameters depend on waste treatment process(es) involved	<i>Not applicable</i> The operator has stated that only small quantity venting of inert/atmospheric gases occurs. There are no channelled emissions to air and the pressure relief valves on the distillation process are a safety feature only.
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	<i>Not applicable</i> The operator has stated that there are no emissions to air of organic compounds from processes involving solvents.
	b Emissions factor calculation	<i>Not applicable</i> As above.
	c Mass balance calculation	<i>Not applicable</i> As above.
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	<i>Not applicable</i> The operator has stated that no odour emissions were identified in the risk assessment (referenced document ERA-A1r4-Odour). The odour risk assessment on file (2016) states the risk from odour is not significant. There are no compliance issues relating to odour.
	Use equivalent methods e.g. ISO / national / international monitoring standards	<i>Not applicable</i> 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
11	Annual monitoring for:	
	- Water, energy and raw materials	Currently compliant The operator has stated that water, energy and raw materials usage is monitored and reviewed as part of the management review process (referenced document Management Review 2019). Annual monitoring will be added to the permit requirements.
	- Generation of residues and waste water	Compliant in future The operator has stated that there are no residues or waste water generated. The installation activity is for transfer of gases and storage of liquids and gases prior to transfer off-site for treatment but there is also a DAA for distillation. It is understood that once the appropriate product is recovered from the distillation process, the remaining residues are pumped out and bulked up for waste disposal. Monitoring of the annual generation of residues has been added to the permit.
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 The operator has stated that an odour risk assessment was completed with no significant risks identified and there is therefore

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
		no plan in place (referenced document ERA-A1r4 Odour). There are no compliance issues relating to odour.
	Protocol for conducting odour monitoring (BAT 10)	<i>Not applicable</i> As above
	Protocol for response to odour incidents/complaints	<i>Not applicable</i> As above
	Odour prevention and reduction programme	<i>Not applicable</i> As above
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) <i>Not applicable</i> There are no open systems.
	b.	Use chemical treatment (N/A if desired output is hampered) <i>Not applicable</i> Chemical treatment is not used and not appropriate to the activities undertaken at the installation. There are no channelled emissions to air.
	c.	Optimising aerobic treatment – see examples. Refer to BAT 36 for wastes other than water-based liquid waste. <i>Not applicable</i> No aerobic treatment is undertaken.
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 <i>Compliant in future</i> The operator has indicated that a re-assessment of existing equipment in accordance with these BAT techniques needs to be undertaken. This should include consideration of the venting and distillation activities. An improvement condition has been set.

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.	Select and use high-integrity equipment – see examples
	c.	Corrosion prevention – see examples
	d.	Containment, collection and treatment of diffuse emissions – see examples
	e.	Dampening (with water or fog)
	f.	Maintenance – see examples
	g.	Cleaning of waste treatment and storage areas – see examples
	h.	Leak Detection and Repair (LDAR) programme for organics – S6.2
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
	b.	Plant management including gas system balancing and advanced process control
16	Reduce emissions to air when flaring is unavoidable. Use <u>both</u> of the following:	
	a.	Correct design of flaring devices – see examples
	b.	Monitoring and recording as part of flare management – see examples
Compliant in future As above		
Compliant in future As above		
Compliant in future As above		
Compliant in future As above		
Compliant in future As above		
Compliant in future As above		
Not applicable Flaring is not used at the installation.		
Not applicable 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
NOISE AND VIBRATIONS		
17	Set up, implement, and regularly review a Noise and Vibration Management Plan (as part of the EMS) where nuisance is expected and/or has been substantiated. Include <u>ALL</u> of the following:	
	I. Protocol with actions and timelines	<i>Not applicable</i> The operator has stated that a noise and vibration assessment has been completed with no significant risks identified. The Environmental Risk Assessments 2016 document on file indicates no significant risks from noise. There are no noise compliance issues at the site. There is no noise management plan in place nor requirement for one based on the risk assessments.
	II. Noise and vibration monitoring plan/protocol	<i>Not applicable</i> As above.
	III. Noise & vibration complaint response plan/protocol	<i>Not applicable</i> As above.
	IV. Noise and vibration reduction programme	<i>Not applicable</i> As above.
18	Techniques to prevent, or where not practicable reduce noise and vibration emissions. Use one or a combination of the following:	
	a. Appropriate location of equipment and buildings	<i>Not applicable</i> The operator has stated that a noise and vibration assessment has been completed with no significant risks identified. Insufficient

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 has been provided to assess compliance with BAT 18, which is applicable regardless of noise risk.
	b.	Operational measures – see examples	Currently Compliant The operators Environmental Risk Assessment indicates: deliveries are limited to normal working hours, forklift truck movement is limited to day time hours, venting of air gas receptacles is done in a controlled manner and monitored by a Technical Manager, equipment is regularly inspected and calibrated, personnel are trained in the operation of lifting equipment.
	c.	Low-noise equipment – see examples	<i>Not applicable</i> As above.
	d.	Noise & vibration control equipment – see examples	<i>Not applicable</i> As above.
	e.	Noise attenuation – see examples	<i>Not applicable</i> As above.
EMISSIONS TO WATER			
19	Optimise water consumption, reduce waste water 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	<i>Not applicable</i> There are no emissions to water and the installation activity does not involve consumption of water.
	b.	Water recirculation	<i>Not applicable</i>

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			There are no emissions to water and the installation activity does not involve consumption of water.
	c.	Impermeable surface	<i>Not Applicable</i> The site does not store any liquid or solid wastes. Liquified gas cylinders are stored in secondary containment. Liquified gas storage are not within scope of CIRIA736. Improvement condition has been set in order for other techniques listed in this BATc are considered.
	d.	Reduce likelihood and impact of tank/vessel overflows and failures – see examples	No information has been provided as BAT 19, improvement condition has been set.
	e.	Roofing of waste storage and treatment areas	No information has been provided as BAT 19, improvement condition has been set.
	f.	Segregation of water streams (being mindful of existing plant constraints)	<i>Currently compliant</i> There are no waste water streams from the installation. Surface water is collected and drains through an interceptor.
	g.	Adequate drainage infrastructure	<i>Currently compliant</i> There are no waste water streams from the installation. Surface water is collected and drains through an interceptor.
	h.	Design and maintenance provisions to allow risk-based leak detection and repair. Minimise use of underground components.	No information has been provided as BAT 19, improvement condition has been set.
	i.	Appropriate buffer storage capacity (being mindful of existing plant constraints)	No information has been provided as BAT 19, improvement condition has been set.
20	Treat waste water using a combination of: <i>Preliminary, primary and general treatment</i>		

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	a. Equalisation	<i>Not applicable</i> There are no waste water emissions.
	b. Neutralisation	<i>Not applicable</i> As above
	c. Physical separation	<i>Not applicable</i> As above
	Physico-chemical treatment	
	d. Adsorption	<i>Not applicable</i> There are no waste water emissions.
	e. Distillation/rectification	<i>Not applicable</i> As above
	f. Precipitation	<i>Not applicable</i> As above
	g. Chemical oxidation	<i>Not applicable</i> As above
	h. Chemical reduction	<i>Not applicable</i> As above
	i. Evaporation	<i>Not applicable</i> As above
	j. Ion exchange	<i>Not applicable</i> As above
	k. Stripping	<i>Not applicable</i> As above
	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
	m.	Membrane bioreactor
	Nitrogen removal	
	n.	Nitrification/denitrification (where biological treatment used)
	Solids removal	
	o.	Coagulation and flocculation
	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
	COD (TOC is preferred)	30-180 30-300 for water-based liquid waste
Not applicable There are no waste water emissions. Not applicable As above Not applicable There are no waste water emissions. Not applicable There are no waste water emissions. Not applicable As above Not applicable As above Not applicable As above Not applicable As above Not applicable As above Not applicable There are no waste water emissions. Not applicable 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
	Suspended solids	5.0-60	<i>Not applicable</i> As above
	HOI	0.5-10 applying to specific waste treatments	<i>Not applicable</i> As above
	Total N	1-25 for biological treatment and waste oil re-refining 10-60 for water-based liquid waste	<i>Not applicable</i> As above
	Total P	0.3-2 for biological treatment 1-3 for water-based liquid waste	<i>Not applicable</i> As above
	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	<i>Not applicable</i> As above
	Free CN-	0.02-0.1 for water-based liquid waste	<i>Not applicable</i> As above
	AOX	0.2-1 for water-based liquid waste	<i>Not applicable</i> As above
	Metals & Metalloids – specific waste treatments as listed in Table 6.1		<i>Not applicable</i> As above
	As	0.01-0.05	<i>Not applicable</i> As above
	Cd	0.01-0.05	<i>Not applicable</i> 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
	Cr	0.01-0.15	<i>Not applicable</i> As above
	Cu	0.05-0.5	<i>Not applicable</i> As above
	Pb	0.05-0.1	<i>Not applicable</i> As above
	Ni	0.05-0.5	<i>Not applicable</i> As above
	Hg	0.5-5	<i>Not applicable</i> As above
	Zn	0.1-1	<i>Not applicable</i> As above
	Metals & Metalloids – treatment of water-based liquid waste		
	As	0.01-0.1	<i>Not applicable</i> As above
	Cd	0.01-0.1	<i>Not applicable</i> As above
	Cr	0.01-0.3	<i>Not applicable</i> As above
	Hexavalent Cr [Cr(VI)]	0.01-0.1	<i>Not applicable</i> 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
	Cu	0.05-0.5	<i>Not applicable</i> As above
	Pb	0.05-0.3	<i>Not applicable</i> As above
	Ni	0.05-1	<i>Not applicable</i> As above
	Hg	1.0-10	<i>Not applicable</i> As above
	Zn	0.1-2	<i>Not applicable</i> As above
	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	<i>Not applicable</i> As above
	Free CN-	0.02-0.1 for water-based liquid waste	<i>Not applicable</i> As above
	AOX	0.2-1 for water-based liquid waste	<i>Not applicable</i> As above
	Metals & Metalloids – specific waste treatments as listed in Table 6.2		
	As	0.01-0.05	<i>Not applicable</i> As above
	Cd	0.01-0.05	<i>Not applicable</i> As above
	Cr	0.01-0.15	<i>Not applicable</i>

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		As above
	Cu	<i>Not applicable</i> As above
	Pb	<i>Not applicable</i> As above
	Ni	<i>Not applicable</i> As above
	Hg	<i>Not applicable</i> As above
	Zn	<i>Not applicable</i> As above
	Metals & Metalloids – treatment of water-based liquid waste	
	As	<i>Not applicable</i> As above
	Cd	<i>Not applicable</i> As above
	Cr	<i>Not applicable</i> As above
	Hexavalent Cr [Cr(VI)]	<i>Not applicable</i> As above
	Cu	<i>Not applicable</i>

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			As above
	Pb	0.05-0.3	<i>Not applicable</i> As above
	Ni	0.05-1	<i>Not applicable</i> As above
	Hg	1.0-10	<i>Not applicable</i> As above
	Zn	0.1-2	<i>Not applicable</i> As above
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	<i>Compliant in future</i> The operator has stated that the environmental risk assessment identifies the existing and necessary protection measures (referenced document ERA-A4 Accidents). Further information is required relating to fire and explosion protection in particular accessibility and operability in emergency situations and an improvement condition has been set.
	b.	Management of incidental or accidental emissions	<i>Currently compliant</i> The accident management plan details measures for the management of incidental or accidental emissions (referenced

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
			documents AMP-JRT-01, EP001 Fire, EP002 Gas Release, EP003 Spillage to Drain)
	c.	Incident/accident registration and assessment system – see examples	Currently compliant The accident management plan details measures for recording, assessment and review of accidents and incidents (referenced document AMP-JRT-01).
MATERIAL EFFICIENCY			
22	Use materials efficiently by substituting materials with waste e.g. waste acids/alkalis for pH adjustment, fly ashes for binders		Not applicable The operator has indicated that raw material use is limited to diesel for the fork lift truck and that there are no in process requirements. There is therefore no viable substitution with waste identified.
ENERGY EFFICIENCY			
23	Use energy efficiently by using both of the following techniques:		
	a.	Energy efficiency plan	Not applicable The operator has stated that due to the simplicity of the operation, energy efficiency and recording is done as part of the management review process. Energy usage is recorded, and any efficiency improvements discussed (referenced document Management Review 2019).

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.	Energy balance record	<i>Not applicable</i> As above.
REUSE OF PACKAGING			
24	Maximise the reuse of packaging as part of a Residues Management Plan (see BAT 1 XII.)		<i>Compliant in future</i> The operator has stated that the reuse of packaging is covered in the residues management plan (referenced document RMP-JRT-01) though has not provided information on how the reuse of packaging is maximised / quantity of waste sent for disposal is reduced. This contradicts the operator’s response to BAT 1 which states there is no residues management plan in place. An improvement condition has been set.
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	<i>Not applicable</i> No mechanical treatment of waste is undertaken.
	b.	Fabric filter – see S6.1	<i>Not applicable</i> No mechanical treatment of waste is undertaken.
	c.	Wet scrubbing – see S6.1	<i>Not applicable</i>

BATc number	Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			No mechanical treatment of waste is undertaken.
	d.	Water injection into the shredder	<i>Not applicable</i> No mechanical treatment of waste is undertaken.
	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	
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	<i>Not applicable</i> No mechanical treatment of waste in shredders is undertaken.
	(b)	Remove dangerous items from waste inputs and dispose of them in a safe manner	<i>Not applicable</i> No mechanical treatment of waste in shredders is undertaken.
	(c)	Treatment of containers accompanied by a declaration of cleanliness	<i>Not applicable</i> No mechanical treatment of waste in shredders is undertaken.
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	<i>Not applicable</i> No mechanical treatment of waste in shredders is undertaken.
	b.	Pressure relief dampers	<i>Not applicable</i> No mechanical treatment of waste in shredders is undertaken.
	c.	Pre-shredding (device)	<i>Not applicable</i>

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		No mechanical treatment of waste in shredders is undertaken.
28	Use energy efficiently by keeping the shredder feed stable	
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 <i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	b.	Cryogenic condensation <i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	c.	Adsorption <i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	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 <i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	CFCs	0.5-10 <i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
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. N ₂ <i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	b.	Forced ventilation <i>Not applicable</i>

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		No mechanical treatment of WEEE is undertaken.
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	
	No mechanical treatment of waste of calorific value is undertaken.	
	b.	Biofilter – see S6.1
	Not applicable	
	No mechanical treatment of waste of calorific value is undertaken.	
	c.	Thermal oxidation – see S6.1
	Not applicable	
	No mechanical treatment of waste of calorific value is undertaken.	
	d.	Wet scrubbing – see S6.1
	Not applicable	
	No mechanical treatment of waste of calorific value is undertaken.	
	BAT-AEL for channelled TVOC emissions to air from the mechanical treatment of waste with calorific value (mg/Nm³) <i>Table 6.5 and its supporting note. Monitoring requirements are outlined in BAT 8</i>	
	TVOC	10.0-30.0
Not applicable		No mechanical treatment of waste of calorific value is undertaken.
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:	

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
	Equipment is enclosed, under negative pressure and connected to a LEV system	<i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	Waste gas treated using dedusting techniques – see examples – followed by adsorption on activated carbon	<i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	Monitoring of waste gas treatment efficiency	<i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	Mercury levels measured at least weekly within treatment and storage areas	<i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
	BAT-AEL for channelled mercury (Hg) emissions to air from the mechanical treatment of WEEE containing mercury (µg/Nm³) <i>Table 6.6. Monitoring requirements are outlined in BAT 8</i>	
	Hg 2.0-7.0	<i>Not applicable</i> No mechanical treatment of WEEE is undertaken.
BIOLOGICAL TREATMENT OF WASTE (GENERAL BAT)		
33	Reduce odour emissions and improve overall environmental performance by selecting the waste input (to ensure its suitability for biological treatment). See also BAT 2	<i>Not applicable</i> No biological treatment of waste is undertaken.
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	<i>Not applicable</i> No biological treatment of waste is undertaken.
	b. Biofilter – see S6.1	<i>Not applicable</i>

BATc number	Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
		No biological treatment of waste is undertaken.
	c.	Fabric filter – see S6.1. <i>Not applicable</i> No biological treatment of waste is undertaken.
	d.	Thermal oxidation – see S6.1 <i>Not applicable</i> No biological treatment of waste is undertaken.
	e.	Wet scrubbing – see S6.1 <i>Not applicable</i> No biological treatment of waste is undertaken.
	BAT-AEL for channelled NH₃, odour, dust and TVOC emissions to air from the biological treatment of waste (mg/Nm³) (ou_E/m³) <i>Table 6.7 and its supporting notes. Monitoring requirements are outlined in BAT 8</i>	
	NH ₃	0.3-20 <i>Not applicable</i> No biological treatment of waste is undertaken.
	Odour	200-1000 <i>Not applicable</i> No biological treatment of waste is undertaken.
	Dust	2.0-5.0 <i>Not applicable</i> No biological treatment of waste is undertaken.
	TVOC	5.0-40 <i>Not applicable</i> No biological treatment of waste is undertaken.
35	Reduce the generation of waste water and reduce water usage by using <u>ALL</u> of the following:	
	a.	Segregation of water streams (see also BAT 19f) <i>Not applicable</i> No biological treatment of waste is undertaken.
	b.	Water recirculation <i>Not applicable</i> No biological treatment of waste is undertaken.
	c.	Minimisation of the generation of leachate <i>Not applicable</i> No biological treatment of waste is undertaken.

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 TREATMENT OF WASTE: AEROBIC METHODS		
36	Reduce emissions to air and improve overall environmental performance by monitoring and/or controlling key waste and process parameters. Include following elements:	
	Waste input characteristics e.g. C to N ratio, particle size	<i>Not applicable</i> No aerobic biological treatment of waste is undertaken.
	Temperature and moisture content within windrows (Moisture monitoring not needed for enclosed processes where H&S issues have been identified)	<i>Not applicable</i> No aerobic biological treatment of waste is undertaken.
	Aeration of the windrow	<i>Not applicable</i> No aerobic biological treatment of waste is undertaken.
	Windrow porosity, height and width	<i>Not applicable</i> No aerobic biological treatment of waste is undertaken.
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 <i>Not applicable</i> No aerobic biological treatment of waste is undertaken.
	b.	Adaptation of operations to the meteorological conditions <i>Not applicable</i> No aerobic biological treatment of waste is undertaken.
BIOLOGICAL TREATMENT OF WASTE: ANAEROBIC 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
38	Reduce emissions to air and improve overall environmental performance by monitoring and/or controlling key waste and process parameters. Include following elements:	
	<i>Implement a manual and/or automatic monitoring system to:</i>	
	Ensure a stable digester operation	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Minimise operational difficulties and associated odour emissions	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Provide sufficient early warning of system failures	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Windrow porosity, height and width	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	<i>Monitoring and/or control of key waste and process parameters – examples below:</i>	
	pH and alkalinity of the digester feed	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Digester operating temperature	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Hydraulic and organic loading rates of the digester feed	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Volatile fatty acids and NH3 concentrations within digester & digestate	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Biogas quantity, composition (e.g. H2S) and pressure	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.
	Liquid and foam levels in the digester	<i>Not applicable</i> No anaerobic biological treatment of waste is undertaken.

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

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	b.	Biofilter – see S6.1	<i>Not applicable</i> No physico-chemical treatment of solid/pasty waste is undertaken.
	c.	Fabric filter – see S6.1.	<i>Not applicable</i> No physico-chemical treatment of solid/pasty waste is undertaken.
	d.	Wet scrubbing – see S6.1	<i>Not applicable</i> No physico-chemical treatment of solid/pasty waste is undertaken.
	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	<i>Not applicable</i> No physico-chemical treatment of solid/pasty waste is undertaken.
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		<i>Not applicable</i> No re-refining of waste oil is undertaken.
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	<i>Not applicable</i> No re-refining of waste oil is undertaken.
	b.	Energy recovery	<i>Not applicable</i>

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			No re-refining of waste oil is undertaken.
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	<i>Not applicable</i> No re-refining of waste oil is undertaken.
	b.	Thermal oxidation – see S6.1	<i>Not applicable</i> No re-refining of waste oil is undertaken.
	c.	Wet scrubbing – see S6.1	<i>Not applicable</i> No re-refining of waste oil is undertaken.
	<i>The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies.</i> <i>Monitoring requirements are outlined in BAT 8</i>		
PHYSICO-CHEMICAL TREATMENT OF WASTE WITH CALORIFIC VALUE			
45	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Adsorption – see S6.1	<i>Not applicable</i> No physico-chemical treatment of waste with calorific value is undertaken.
	b.	Cryogenic condensation – see S6.1	<i>Not applicable</i> No physico-chemical treatment of waste with calorific value is undertaken.
	c.	Thermal oxidation – see S6.1	<i>Not applicable</i> No physico-chemical treatment of waste with calorific value is undertaken.

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	d.	Wet scrubbing – see S6.1	<i>Not applicable</i> No physico-chemical treatment of waste with calorific value is undertaken.
The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies. <i>Monitoring requirements are outlined in BAT 8</i>			
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)	<i>Not applicable</i> No regeneration of spent solvents is undertaken.
	b.	Energy recovery e.g. using distillation residues	<i>Not applicable</i> No regeneration of spent solvents is undertaken.
47	Reduce emissions to air of organic compounds by applying BAT 14d <u>AND</u> using a <u>combination of</u> the following techniques:		
	a.	Recirculation of process off-gases in a steam boiler. Avoid generating PCBs and/or PCDD/Fs	<i>Not applicable</i> No regeneration of spent solvents is undertaken.
	b.	Adsorption – see S6.1	<i>Not applicable</i> No regeneration of spent solvents is undertaken.
	c.	Thermal oxidation – see S6.1. Avoid generating PCBs and/or PCDD/Fs	<i>Not applicable</i> No regeneration of spent solvents is undertaken.
	d.	Condensation or cryogenic condensation	<i>Not applicable</i> No regeneration of spent solvents is undertaken.
	e.	Wet scrubbing – see S6.1	<i>Not applicable</i>

BATc number		Summary of BAT Conclusion requirement	Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
			No regeneration of spent solvents is undertaken.
<i>The BAT-AEL for TVOC emissions to air set in Section 4.5 (below) applies.</i> <i>Monitoring requirements are outlined in BAT 8</i>			
BAT-AEL FOR EMISSIONS OF ORGANIC COMPOUNDS TO AIR – SECTION 4.5 (RE-REFINING OF WASTE OIL) (PHYSICO-CHEMICAL TREATMENT OF WASTE WITH CV) (REGENERATION OF SPENT SOLVENTS)			
<i>BAT-AEL for channelled TVOC emissions to air from the re-refining of waste oil, physico-chemical treatment of waste with calorific value and regeneration of spent solvents (mg/Nm3)</i> <i>Table 6.9 and its supporting note. Monitoring requirements are outlined in BAT 8</i>			
	TVOC	5.0-30	<i>Not applicable</i> No re-refining of waste oil, physico-chemical treatment of waste with calorific value or regeneration of spent solvents is undertaken.
THERMAL TREATMENT OF SPENT ACTIVATED CARBON, WASTE CATALYSTS AND EXCAVATED CONTAMINATED SOIL			
Improve overall environmental performance by using <u>ALL</u> of the following techniques:			
48	a.	Heat recovery from the furnace off-gas e.g. for preheating combustion air or steam generation	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.

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.	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	c.	Process-integrated techniques to reduce emissions to air – see examples	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
49	Reduce emissions to air of HCl, HF, dust and organic compounds by applying BAT 14d <u>AND</u> using one or a combination of the following techniques:		
	a.	Cyclone – see S6.1	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	b.	Electrostatic precipitator (ESP) – see S6.1	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	c.	Fabric filter – see S6.1	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	d.	Wet scrubbing – see S6.1	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	e.	Adsorption – see S6.1	<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	f.	Condensation – see S6.1	<i>Not applicable</i>

BATc number		Summary of BAT Conclusion requirement		Status/comment One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
				No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	g.	Thermal oxidation – see S6.1		<i>Not applicable</i> No thermal treatment of spent activated carbon, waste catalysts or excavated contaminated soil is undertaken.
	<i>Note supporting text for BAT 49g (thermal oxidation)</i> <i>Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.</i>			
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		<i>Not applicable</i> No water washing of contaminated soil is undertaken.
	b.	Fabric filter – see S6.1		<i>Not applicable</i> No water washing of contaminated soil is undertaken.
	c.	Wet scrubbing – see S6.1		<i>Not applicable</i> No water washing of contaminated soil is undertaken.
	<i>Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.</i>			
Decontamination of equipment containing PCBs				

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
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	<i>Not applicable</i> No decontamination of equipment containing PCBs is undertaken.
	b.	Implementation of staff access rules to prevent dispersion of contamination – see examples	<i>Not applicable</i> No decontamination of equipment containing PCBs is undertaken.
	c.	Optimised equipment cleaning and drainage – see examples	<i>Not applicable</i> No decontamination of equipment containing PCBs is undertaken.
	d.	Control and monitoring of emission to air – see examples	<i>Not applicable</i> No decontamination of equipment containing PCBs is undertaken.
	e.	Disposal of waste treatment residues – see examples	<i>Not applicable</i> No decontamination of equipment containing PCBs is undertaken.
	f.	Recovery of solvent when solvent washing is used	<i>Not applicable</i> No decontamination of equipment containing PCBs is undertaken.
	Monitoring requirements are outlined in BAT 8. No BAT-AELs have been set for this BATc.		
TREATMENT OF WATER-BASED LIQUID WASTE			
52	Improve overall environmental performance by monitoring the waste input as part of the waste pre-acceptance and acceptance procedures. See also BAT 2.		
	Monitoring the waste input		
	Bioeliminability e.g. BOD, BOD-COD ratio, Zahn-Wellens test, biological inhibition potential		<i>Not applicable</i> No treatment of water-based liquid waste is undertaken.

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

Annex 2: Consultation on the draft decision where an Article 15(4) derogation has been applied

Not applicable.