Permitting Decisions- Environment Agency Initiated Variation

We issued an Environment Agency initiated variation for Discovery Park Waste Water Treatment Facility operated by Discovery Park Management Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/AP3438YK/V002.

Permit Review

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

We have reviewed the permit for this regulated facility and varied the permit to make a number of changes to reflect relevant standards and best practice. These changes principally relate to the implementation of our technical guidance:

- Chemical waste appropriate measures for permitted facilities and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.

- Biological waste treatment appropriate measures for permitted facilities and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.

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

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

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single

document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

Purpose of this document

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

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

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

Key issues of the decision

Treatment process

The site treats liquid wastes delivered via both tankers and pipelines, as well as wastewater originating from commercial facilities. In the future, it may also process wastewater from domestic properties.

We have decided that the treatment of foul effluent can be included in the permit alongside the trade effluent. The decision was made because the foul effluent (non-hazardous) is necessary for the treatment of trade effluent (hazardous) using activated sludge. The mixing and blending of these two effluent types is permissible under this permit, as they are treated together in the same system. Since the site is not a sewerage undertaker and does not issue consents for these effluents, it essentially accepts waste via drainage.

Previously, a physico-chemical treatment method was employed, involving lime dosing for flocculating process solids, pH adjustment of the effluent, and providing alkalinity necessary for the biological nitrification process. Lime is no longer administered during the primary treatment stage at the Wastewater Treatment Facility (WWTF) due to the cessation of heavy metal-containing effluents being received on site. However, effluent continues to pass through the tanks and clarifier. This change pertains to the S5.3 Part A (1)(a)(i) - biological treatment activity in the existing permit. The lime dosing has been removed from this activity, and the permit has been updated accordingly. We have confirmed with the operator that physico-chemical treatment, including flocculation and pH

adjustment, is still conducted and has been incorporated into the permit as a separate S5.3 Part A (1)(a)(ii) - physico-chemical treatment activity.

Mixing of hazardous and non-hazardous waste

We have allowed the mixing of hazardous and non-hazardous waste at this facility as we are satisfied that the sole objective is not dilution to meet BAT-AELs. We consider this to be disposal D8 operation as the non-treatable metals end up in the sludge fraction and that sludge is landfilled and not spread to land. We are satisfied that the heavy metals are not being transferred from one environment medium to another (via land spreading of the sludge), so this is consistent with Article 15 and Recital 3 & Recital 14 of the Industrial Emissions Directive.

Emissions to water

After the treatment, the operator will discharge the waste waters directly to a receiving water body, River Stour. The Waste Treatment BREF specifies BAT AELs for direct emissions to a water body which the operator must comply with. BAT AELs or emission limits will be applied to the discharge into the water body for substances of concern.

The BAT AELs are appropriate for the activity defined under the BREF as 'Treatment of water-based liquid waste'. The BREF provides examples of wastes that would be considered as water-based liquid wastes. These include wastes under the category '19 08 wastes from waste water treatment plants not otherwise specified'. The treatment of this waste via activated sludge treatment and the subsequent discharge to the receiving water body will be subject to the BAT AELs specified within BAT conclusion 20 (Table 6.2 of the Waste Treatment BREF).

The operator has not fully characterised the emissions to water (in line with BAT conclusion 3), therefore, all BAT AELs have been applied. We have set improvement conditions (IC38 and IC39) for the operator to determine the composition of the waste in a waste inventory. The limits will only apply when the substance concerned is identified as relevant in the waste water inventory.

Until the operator has completed IC38 and IC39 the permit specifies limits for:

- Hydrocarbon oil index (HOI) (mg/l).
- Free cyanide (CN^-) (mg/l).
- Adsorbable organically bound halogens (AOX) (mg/l).
- Metals and metalloids; arsenic (expressed as As), cadmium (expressed as Cd), chromium (expressed as Cr), hexavalent chromium (expressed as Cr(VI)), copper (expressed as Cu), lead (expressed as Pb), nickel

(expressed as Ni), mercury (expressed as Hg), zinc (expressed as Zn) (µg/l).

Table 5.77: Examples of types of water-based liquid waste

LoW chapter	Title	Waste list
06	Wastes from inorganic chemical processes	0601 waste acidic solutions 0602 waste alkaline solutions 0603 waste salts and their solutions 0604 waste containing metals 0605 sludges from on-site effluent treatment
07	Wastes from organic chemical processes	0701 wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals 0702 wastes from the MFSU of plastics, synthetic rubber and man-made fibres 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
11	Inorganic wastes containing metal from metal treatment and the coating of metal; non-ferrous hydrometallurgy	1101 liquid wastes and sludges from metal treatment and coating of metals (e.g. galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing)
12	Wastes from shaping and surface treatment of metals and plastics	1201 wastes from shaping (including forging, welding, pressing, drawing, turning, cutting and filing) 1202 wastes from mechanical surface treatment processes (blasting, grinding, honing, lapping, polishing) 1203 wastes from water and steam degreasing processes
13	Oil wastes	1304 bilge oils 1305 oil-water separator contents
19	Wastes from waste treatment facilities, off-site waste water treatment plants and the water industry	1908 wastes from waste water treatment plants not otherwise specified

Source: [13, Schmidt et al. 2002]

Emissions to air

We have decided to apply the Best Available Techniques (BAT) Associated Emission Levels (BAT-AELs) and monitoring requirements for the biological treatment of waste and the treatment of water-based liquid waste for emissions to air. These requirements are derived from the Waste Treatment BAT conclusions, which are part of the BAT reference documents (BREFs) established under the Industrial Emissions Directive (IED) 2010/75/EU. We made this decision because the site accepts water-based liquid waste which undergoes biological treatment via activated sludge. The requirement of the monitoring is set out in table S3.1 of the permit.

For Emission point A1, we have applied monitoring requirements including parameters and limits for the biological waste treatment and water-based liquid BAT AELs, while emission point A2 is limited to water-based liquid waste BAT AELs, as no biological treatment occurs at this location.

BAT-associated emission levels (BAT-AELs) for the treatment of water based liquid wastes are identified as hydrogen chloride (HCl), ammonia (NH_3) and total volatile organic compounds (TVOC). The monitoring for HCl, TVOC and NH_3 for the treatment of water based liquid wastes only applies when the substance concerned is identified as relevant in the waste gas stream based on the inventory mentioned in BAT 3.

As the operator has not fully characterised the emissions to air and provided evidence to demonstrate that HCl, TVOC, and NH_3 are not present in the emissions, we have specified the following BAT-AELs in the permit:

- 20 mg/Nm³ for Ammonia (NH_3)
- 5 mg/Nm³ for Hydrogen Chloride (HCl)
- 20 mg/Nm³ for Total Volatile Organic Compounds (TVOC)

It should be noted that the limits for HCl and TVOC only apply when the substances of concern are identified in the waste gas streams characterised in BAT conclusion 3. Improvement conditions IC37a and IC37b require a full investigation and characterisation of waste gas streams to determine if these substances are present. A full characterisation of waste gas streams was not available at the time of submission of the application.

For the biological treatment of waste relating to the activated sludge process we require that odour concentrations are limited to less than 1,000 ouE/Nm^3 at the point of release or, in the case of an ammonia release, no more than 20 mg/Nm^3. The upper BAT-AEL limit for ammonia is specified in the permit.

Abatement

The installation includes industrial processes which produce waste gas and odour emissions that are discharged to air via vents or stacks.

The Chemical waste appropriate measures states that the storage of wastes must be contained and abated as one of the measures taken to prevent and minimise emissions:

6.1.1 of Chemical Waste Appropriate Measures: *'You must contain storage tanks, silos and waste treatment plant (including shredders) to make sure you collect, extract and direct all process emissions to an appropriate abatement system for treatment before release.'*

The Chemical waste appropriate measures states that the point source emissions (including vents) from treatment tanks that potentially contain emissions to air must be abated:

6.1.4 of Chemical Waste Appropriate Measures: *'To reduce point source emissions to air (for example, dust, volatile organic compounds and odour) from the treatment of waste, you must use an appropriate combination of abatement techniques.*'

BAT conclusion 14 of the Waste Treatment BREF states that emissions from diffuse sources should use techniques like, *collecting and directing the emissions to an appropriate abatement system via an air extraction system and/or air suction systems close to the emission sources*. This installation includes the storage and treatment of wastes in tanks and vessels. To prevent diffuse

emissions of pollutants such as odour, ammonia and VOCs, emissions are extracted and treated by an air abatement system. The abatement technology used at Discovery Park Waste Water Treatment Facility are bioscrubbers. The treated air stream is then discharged to atmosphere via a stack.

As part of the determination, we reviewed the operator's abatement plant and its suitability in providing effective abatement to diffuse air emissions.

The bioscrubber acts as a humidifier and degrade a high portion of the odorous load.

Bioscrubbers are a low energy treatment process suitable for removal of low levels of odorous compounds. As they utilise final effluent as their process fluid, they have a minimal environmental impact whilst reducing the prevalence of nuisance odours and are considered BAT.

Reported odour abatement efficiency (%) 70–80 in the Waste Treatment Bref.

It should be noted that any further reviews of the existing system could determine that the existing systems are not suitable for the waste gas emissions. Should a review identify that a new abatement system is required, a variation application is needed.

Any new abatement plant in relation to the tanks that are to be enclosed under the IC40 should be designed to reduce odours and where required, ammonia. The operator will need to ensure that new abatement systems achieve the BAT AEL for odour or limits defined by the plant design, whichever is less. We have therefore set, as a minimum, the BAT AEL for odour concentration of 1,000 ou_E/m^3 in this permit. Should the operator seek to install an abatement system which cannot meet this requirement, it is unlikely that the abatement plant will be BAT.

We have inserted process monitoring requirements for the bio scrubbers in Table S3.3 of the permit.

Management of diffuse emissions (BAT conclusion 14)

The operator is required to install enclosures/covers and associated emission abatement systems in accordance with BAT 14, BAT 34, and BAT 53 for storage and treatment tanks. Following the guidance provided in *"Chemical Waste Treatment: Appropriate Measures for Permitted Facilities"* and *"Biological Waste Treatment: Appropriate Measures for Permitted Facilities"* for activated sludge treatment.

Chemical appropriate measures (Section 4 Waste storage, segregation and handling appropriate measures) states:
4.11. You must not store hazardous waste in open-topped containers. Empty open-topped containers should be kept in a building or undercover to prevent

rainwater ingress.
4.52. As a general rule, you must not use open topped tanks, containers, vessels or pits to store or treat hazardous or liquid wastes.

This applies to the tanks listed in Table 5 of the operator's document titled "WWTF Process Description":

- Balance tank x2
- Final effluent clarifier x2
- Sand filter mudwell x1
- Sand filter clearwell x1
- Return liquor splitter box x1
- Sand filter inlet splitter x1
- Sand filter vessels x4
- Final effluent storage x2
- Foul waste storage x1
- Process drain sump x1
- Surface water sump x1

Waste Treatment BAT conclusion 14 requires operators to contain, collect and treat diffuse emissions to air from site the process. BAT is to use an appropriate combination of the techniques summarised below:

- Store, treat, and handle waste/materials in enclosed buildings/equipment.
- Maintain adequate pressure in enclosed equipment/buildings.
- Collect and direct emissions to an abatement system via air extraction/suction systems near emission sources.

The operator did not propose an appropriate alternative measure to the BAT technique of enclosing the tanks with any supporting evidence. The operator is therefore required to enclose the open tanks**.** We have included Improvement condition IC40 for enclosure of tanks storing (or treating) activated sludge.

Secondary containment (BAT conclusion 19)

Secondary containment is a fundamental principle of pollution prevention at industrial sites and waste management facilities. Secondary/tertiary containment is an appropriate protective measure and is a standard requirement of an environmental permit. The Waste Treatment BREF includes BAT conclusion 19 which identifies several relevant techniques to prevent or, where that is not practicable, to reduce emissions to soil and water.

The operator must comply with sections 4 and 6.5 of Chemical Waste: appropriate measures for permitted facilities, including relevant CIRIA, HSE and EEMUA guidance.
Relevant measures of section 4 are listed below and all of section 6.5 is applicable:

4.7. *Secondary and tertiary containment systems must conform to CIRIA guidance C736 Containment systems for the prevention of pollution.*

4.41. *Where relevant, bulk storage systems must conform to CIRIA guidance, and in particular to:*
- *C535 Above ground proprietary prefabricated oil storage tank systems*
- *C598 Chemical storage tank systems - good practice*
- *C736 Containment systems for the prevention of pollution*

4.42. *You must use tanks and associated equipment that are suitably designed, constructed and maintained. You must do a risk assessment to validate the design and operation of bulk storage systems. Before you use new tanks and equipment you must check they are working correctly. You must periodically examine and test that your tanks meet the standards set out in EEMUA Publication 231: The mechanical integrity of plant containing hazardous substances.*

4.45. *You must provide bunds for all tanks containing liquids (whether waste or otherwise) which could be harmful to the environment if spilled. Bunds must meet the CIRIA C535 or C736 standard and:*

- *be impermeable, stable and resistant to the stored materials*
- *have no outlet (that is, no drains or taps), and drain to a blind collection point*
- *have pipework routed within bunded areas with no penetration of contained surfaces*
- *be designed to catch leaks from tanks or fittings*
- *have a capacity calculated following the relevant CIRIA guidance*
- *have regular visual inspections – you must pump out or remove any contents under manual control after you have checked for contamination*
- *be fitted with a high level probe and an alarm (as appropriate) if not frequently inspected*
- *have tanker connection points within the bund where possible – if not possible you must provide adequate containment for spillages or leakage*
- *have programmed engineering inspections (extending to water testing if structural integrity is in doubt)*
- *be emptied of rainwater regularly to maintain the containment capacity*

The WWTF stores and treats significant volumes of activated sludge, and liquids that have the potential to cause pollution to land, air, and water, and to impact detrimentally on any nearby sensitive receptors. They have little in the way of secondary containment, such as impermeable surfacing or bunding, that would protect the environment in the event of a loss of containment.

We have therefore included an improvement condition (IC 35) which requires the operator to submit finalised and detailed secondary containment designs alongside an implementation schedule for a secondary containment system.

Environment Agency led variation – permit review

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

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

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

On 18 November 2020, Chemical Waste: appropriate measures for permitted facilities guidance was published on gov.uk. This technical guidance explains the standards that are relevant to regulated facilities with an environmental permit to treat or transfer chemical waste, providing relevant standards (appropriate measures) for those sites and incorporating the relevant requirements of the BAT Conclusions.

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

- Biological waste treatment: appropriate measures for permitted facilities, version published September 2022.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 15/11/2021 requiring the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards (appropriate measures) described in our technical guidance.

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

- Describes the techniques that will be implemented to ensure operations meet the relevant standards and by when, or
- Explains why they are not applicable to the facility in question, or

- Justifies why an alternative technique is appropriate and will achieve an equivalent level of environmental protection to the standards described in our guidance

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

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

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

The Regulation 61 notice required the operator to confirm whether they could comply the standards described in each of these chapters. Table 1 below provides a summary of the response received and our assessment of it. The overall status of compliance with the standards (appropriate measures) is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

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

NC – Not Compliant

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

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

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

The Regulation 61 notice response from the Operator was received on 17/03/2023.

We considered that the response contained sufficient information for us to commence determination of the permit review.

Although we were able to consider the Regulation 61 notice response generally satisfactory at receipt, we needed more information in order to complete our permit review assessment. We requested this by email and the operator provided further information on the following on 09/05/2024, 29/05/2024, 01/10/2024 and 13/03/2025. We made a copy of this information available on our public register.

- Emission point plan
- EWC codes
- Decommissioning plan
- Confirmation of non-hazardous designation for the WWTF sludge
- Onsite wastewater treatment involves biological treatment only
- Hazardous wastes are accepted in accordance with our “Third Party Waste Characterisation and Acceptance” Procedure
- Waste treatment and storage tonnages
- Bioscrubber details
- Mixing of hazardous and non-hazardous waste
- Assessment of compliance with non-hazardous appropriate measures
- EWC Codes: 99 codes and 16 10 02.
- Waste throughput figures
- Tank enclosure
- TOC/COD monitoring
- Total Coliform monitoring (reduced sampling frequencies)
- Confirmation of compliance with biological waste appropriate measures
- Daily treatment capacity for blending or mixing activity of the hazardous and non-hazardous waste effluent
- Daily treatment capacity for sludge dewatering activity
- Storage capacity at any one time of processed filter cake

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

Appropriate measures	Compliance status	Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
General management appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste storage, segregation and handling appropriate measures	FC	The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of appropriate measures 41, 43 and 45 of Section 4. Measure 4.41 requires bulk storage systems to conform to CIRIA guidance and measure 4.45 requires bunds to meet the CIRIA C535 or C736 standard. Improvement condition IC35 has been included in the varied permit to address this. Measure 4.43 requires venting of bulk storage tanks through suitable abatement. Improvement condition IC40 has been included in the varied permit to ensure full compliance with this measure. Compliance with the other appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste treatment appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Emissions control appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.

Emissions monitoring and limits appropriate measures	FC	The operator confirmed that they currently meet the requirements of the appropriate measures in this section with the exception of sections 6.5, 7.1 and 7.2 of the appropriate measures. Section 6.5 details appropriate measures to control potential fugitive emissions to water and land. Improvement condition IC35 has been included in the varied permit to ensure compliance with these measures. Section 7.1 - We have added IC37a and IC37b to the permit to ensure compliance with this section. Section 7.2 - We have added IC38 to the permit to ensure compliance with this section.
Process efficiency appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Reg 61 requirement	**Assessment of response received**	
Soil and groundwater risk assessment	A site condition report was submitted as part of the original permit application. This baseline assessment is still applicable.	
Medium combustion plant and specified generators	The operator has confirmed that there are no medium combustion plant or specified generators associated with their permitted facility.	
Climate change	Climate change is considered on the site's corporate risk register. Climate Change adaption will be delivered through the Environmental Management System condition.	
Biological waste appropriate measures	**Compliance status**	**Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator**
Biological waste appropriate measures	CC	The operator confirmed in response on 13/03/2025 to a request for information dated 20/02/2025 that they currently meet the requirements of the biological waste appropriate measures. Compliance with the appropriate measures of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Summary of other changes made to the permit as a result of our assessment of the Reg 61 response		

Change	Reason for change
Changes to the Activities Table, S1.1 within Schedule 1 of the Permit	There are multiple changes to Table S1.1 Permitted Activities as a result of the review. The following activities have been amended to include AR references: • AR1 - Section 5.3 Part A (1)(a)(i) - biological treatment • AR4 - Section 5.4 Part A (1)(a)(i) - biological treatment The following activities have been added: • AR2 - Section 5.3 Part A (1)(a)(ii) - physico-chemical treatment; - (flocculation and pH adjustment) • AR3 - Section 5.3 Part A (1)(a)(iii) - blending or mixing prior to submission to any of the other activities listed in this section or section 5.1; - (blending tanks to dilute strength of ethanol / antifreeze wastes etc.) • AR5 - Section 5.4 Part A (1)(a)(ii) - physico-chemical treatment; - (flocculation and pH adjustment) • AR6 - Section 5.6 Part A(1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes. The following Directly Associated Activities have been added to the permit: • AR7 - Storage of non-hazardous waste pending recovery or disposal • AR8 - Odour abatement • AR9 - Sludge treatment • AR10 - Sludge storage Additional detail included in the limits of the Activities, with regards AR1, S5.3 Part A (1)(a)(i) and AR4, Section 5.4 A1(a)(i) – additional detail includes treatment description and location, permitted tonnages for treatment and storage of waste streams, storage time limits, storage of process wastes in line with the requirements of BAT and the appropriate measures.
Inclusion of new table for Process Monitoring, Table S3.3	Monitoring requirements have been added in relation to the requirements of the Appropriate Measures. These include a requirement to monitor bio scrubbers parameters listed below: • Gas temperature – inlet and outlet

	• Gas flow rate – inlet and outlet • Moisture content or humidity – inlet and outlet (for dry scrubbers only) • Moisture content or humidity – outlet (for wet scrubbers if used before other abatement systems) • Back pressure • Efficiency assessment • pH scrubber solution (pre-abatement) • pH scrubber solution (post-abatement) • Hydrogen sulphide – inlet and outlet gas stream
Changes to Schedule 7, Site plan	• Addition of Figure 2: Site Layout Plan including emission points; details the locations air emission points A1 and A2.

Decision Considerations

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

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

Identifying confidential information

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

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

The regulated facility

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

The site

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

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

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

The plan is included in the permit.

Operating techniques

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

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

Changes to the permit conditions

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

Improvement programme

We have included an improvement programme to ensure that the permit complies with the appropriate technical guidance for this facility (see Key Issues section). Additionally, IC34 has been complied with and therefore marked as complete.

Changes to EWC codes

The EWC codes have been split into Tables S2.2 and S2.3 based on hazardous and non-hazardous waste treatment activities.

Emission limits

Emission Limit Values (ELVs) for the emissions to air based on Best Available Techniques – Associated Emission Levels (BAT-AELS) for Waste Treatment, have been added for the following substances:

- Total Volatile Organic Compounds (TVOCs), (20 mg/m^3)
- Speciated Volatile Organic Compounds, (No limit set)
- Hydrogen Chloride (HCl), (5 mg/m^3)
- Odour concentration, (1000 ouE/m^3)
- Ammonia (NH3), (20 mg/m^3)
- Hydrogen sulphide (H_2S), (No limit set)

Emissions Limit Values (ELVs) for direct emissions to water course based on Best Available Techniques – Associated Emission Levels (BAT-AELS) for Waste Treatment, have been added for the following substances:

- Chromium (Cr), (0.3 mg/l)
- Copper (Cu), (0.5 mg/l)
- Manganese (Mn), (No limit set)
- Adsorbable organically bound halogens (AOX) (1 mg/l)
- Benzene, toluene, ethylbenzene, xylene (BTEX) (No limit set)
- Free cyanide (CN-), (0.1 mg/l)
- Hexavalent chromium (expressed as Cr(VI)), (0.1 mg/l)
- Hydrocarbon oil index (HOI), (10 mg/l)
- PFOA, (No limit set)
- PFOS, (No limit set)
- Total nitrogen (Total N), (25 mg/l)
- Total phosphorus (Total P), (2 mg/l)
- Phenol index, (0.3 mg/l)

Emission Limit Values (ELVs) for direct emissions to water course based on Best Available Techniques – Associated Emission Levels (BAT-AELS) for Waste Treatment have been amended for the following substances:

- Chemical oxygen demand (COD), (300 mg/l)

Monitoring

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

- Total Volatile Organic Compounds (TVOCs)
- Speciated Volatile Organic Compounds
- Hydrogen Chloride (HCl)
- Odour concentration
- Ammonia (NH_3)
- Hydrogen sulphide (H_2S)

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

- Chromium (Cr)
- Copper (Cu)
- Manganese (Mn)
- Adsorbable organically bound halogens (AOX)
- Benzene, toluene, ethylbenzene, xylene (BTEX)
- Free cyanide (CN-)
- Hexavalent chromium (expressed as Cr(VI))
- Hydrocarbon oil index (HOI)
- PFOA
- PFOS
- Total nitrogen (Total N)
- Total phosphorus (Total P)
- Phenol index

We have decided that monitoring for direct emissions to water course should be amended for the following parameters, using the methods detailed and to the frequencies specified:

- Total suspended solids (TSS)
- Biochemical oxygen demand (BOD)
- Chemical oxygen demand (COD)
- Mercury (Hg)
- Zinc (Zn)
- Lead (Pb)
- Arsenic (As)
- Nickel (Ni)
- Cadmium (Cd)

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

Reporting

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

- Emissions to air - A1 and A2
- Emissions to water – W1
- Process monitoring

Table S4.2 Annual production/treatment has been added to include parameters:

- Hazardous waste treated - Disposal
- Non-hazardous waste treated – Disposal

Table S4.3 Performance parameters has been added to include parameters:

- Water usage
- Energy usage
- Total raw material used

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

The existing Table S4.2 Reporting forms has been amended to Table S4.4 and the following parameters have been added:

- Emissions to air
- Emissions to water and land
- Emissions to sewer
- Water usage
- Energy usage
- Other performance indicators

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

Growth Duty

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

Paragraph 1.3 of the guidance says:

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

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

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