

## Notice: Variation of Permit

This permit has been varied by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under Regulation 46 of the Pollution Prevention and Control (Scotland) Regulations 2012 (“the Regulations”). The terms used in this notice, unless otherwise defined, have the same meaning as in the Regulations.

<b>Permit Number:</b>	PPC/A/1003144/CP01
<b>Site address:</b>	The Girvan Distillery, Grangestone Industrial Estate, Girvan, KA26 9PT
<b>Operator:</b>	William Grant & Sons Distillers Ltd SC 134248 The Glenfiddich Distillery, Dufftown, Keith, Scotland, AB55 4DH FAO The Company Secretary Ewan Henderson
<b>Variation Number:</b>	VAR02
<b>Effective Date of Variation:</b>	25 June 2024
<b>Details of Variation:</b>	The permit is varied as specified in the Schedule attached.

## Schedule

The permit has been varied as follows:

### 1. In the Interpretation of Terms the following definitions have been added:

"Hazardous substance" means substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament on classification, labelling and packaging of substances and mixtures.

"Listed Substance" means priority hazardous substance, priority substance, specific pollutant, certain other pollutant and dangerous substance as detailed in "The Scotland River Basin District (Standards) Directions 2014", as amended.

"fuel" means any solid, liquid or gaseous combustible material.

"gas engine" means an internal combustion engine which operates according to the Otto cycle and used spark ignition to burn fuel.

"gas turbine" means any rotating machine, which converts thermal energy into mechanical work, consisting mainly of a compressor, a thermal device in which fuel is oxidised in order to heat the working fluid, and a turbine, this includes both open cycle and combined cycle gas turbines; and gas turbines in cogeneration mode, all with or without supplementary firing.

"Medium Combustion Plant" means a combustion plant with a rated thermal input equal or greater than 1 megawatt but less than 50 megawatts.

"natural gas" means a naturally occurring methane with no more than 20% (by volume) of inerts and other constituents.

"Oxides of Nitrogen" means nitric oxide and nitrogen dioxide, expressed as nitrogen oxide (NO<sub>2</sub>)

"rated thermal input" means the rate at which fuel can be burned at the maximum continuous rating of the appliance multiplied by the net calorific value of the fuel and expressed as megawatts thermal.

### 2. In Schedule 2, Conditions 2.2.5 and 2.2.6 have been inserted as follows:

2.2.5 The Operator shall keep the following records relating to the operation of any Medium Combustion Plant, as described in Paragraph 1.1.4.2:

- a) the type and quantity of fuel used;

- b) any information relating to any incident involving a Medium Combustion Plant;
- c) all monitoring results as required in Table 2.1

2.2.6 The records required by Condition 2.2.5 shall be kept for a minimum of six years.

**3. In Schedule 2, Conditions 2.4.1 – 2.4.8 have been deleted and replaced by new Conditions 2.4.1 – 2.4.9 as follows:**

2.4.1 The installation must be operated in such a way that the necessary measures are taken to prevent accidents and limit their consequences.

2.4.2 In the event of an incident all necessary measures must immediately be taken:

- a) to prevent, or where that is not practicable to reduce, emissions from the permitted installation;
- b) to limit the environmental consequences as a result of that incident; and
- c) to prevent further possible incidents.

2.4.3 In the event of a breach of any condition of this permit the Operator must immediately take the measures necessary to ensure that compliance is restored in the shortest possible time.

2.4.4 Where a breach of any condition of this Permit poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the Operator must immediately suspend operation of the Permitted Installation or relevant part thereof until such time as it can be operated in compliance with this Permit.

2.4.5 In the event of an incident, the Operator must notify SEPA by telephone without delay to 0800 80 70 60. This notification must include as far as practicable the information specified in 2.4.6.

2.4.6 The Operator must confirm any incident to SEPA in writing by the next working day after identification of the incident. This confirmation must include:

- a) the time and duration of the incident,
- b) the receiving environmental medium or media where there has been any emission because of the incident,
- c) an initial estimate of the quantity and composition of any emission,
- d) the measures taken to prevent or minimise any emission or further emission and a preliminary assessment of the cause of the incident.

2.4.7 Any incident notified to SEPA must be investigated by the Operator, and a report of the investigation sent to SEPA within 14 days of the incident. The report must detail, as a minimum:

- a) the circumstances of the incident,
- b) an assessment of any harm to the environment
- c) the steps taken by the Operator to bring the incident to an end.

The reports must also set out proposals for remediation, where necessary, and for preventing a repetition of the incident.

2.4.8 The Operator shall maintain an Incident Management Plan.

2.4.9 At least every two years, the Operator shall review the Incident Prevention and Mitigation Plan required under Condition 2.4.8. Each review of the said Incident Prevention and Mitigation plan shall be recorded and where the Operator makes any revisions to the said plan, said revisions shall be recorded.

**4. In Schedule 2, Condition 2.5.1 has been deleted and replaced by a new Condition 2.5.1 as follows:**

2.5.1 Annual data totals of raw materials, energy utilised, emissions, and waste produced within the installation, must be recorded in the relevant section of the “Systematic assessment of resource use and efficiency template (IED-T-04)”. A report detailing a review of resource utilisation at the installation must be submitted annually. The report must where possible:

- a) identify ways to reduce raw materials, water used, energy utilised, emissions, and waste produced; and
- b) demonstrate that resource utilisation is improving at the installation year-on-year.

**5. In Schedule 2, Condition 2.5.3 has been deleted and replaced by a new Condition 2.5.3 as follows:**

2.5.3 For the purposes of Conditions 2.5.1 and 2.5.2, “raw materials, energy and fuel” must, as a minimum, include the materials listed in Table 2.3.

**6. In Schedule 2, Table 2.1 has been deleted and replaced by a new Table 2.1 as follows:**

**Table 2.1 – Reporting and Notification Requirements**

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Notification of appropriate person	2.1.1	On first grant of the permit and when any change takes place	Within 4 weeks of permit issue
Notification of deputy person	2.1.2	When deputy is appointed or other point of contact	As necessary
Incident investigation report	2.4.7	within 14 days of the date of the Incident unless otherwise agreed in writing with SEPA	As necessary
Resource utilisation	2.5.1	Annually	31 December 2024
Raw material utilisation data	2.5.2	Annually	31 July 2007
Waste management review	2.6.1	At least every 4 years	31 July 2007
Intention to cease permitted activities	2.9.2	As required	Within three months of intended cessation
Noise & Vibration assessment	3.1.1	At least every 4 years	31 March 2008
Noise Management Plan	3.1.2	At least every 4 years	31 March 2008
Odour Emissions Review	3.2.4	Every three years	31 August 2015
Distillery and Seaside systematic assessment	3.3.3	Every 5 years	30 April 2025
Distillery and Seaside Groundwater Monitoring	3.3.4	First Monitoring completed by 31 January 2025 and results reported within three months. Monitoring every 5 years thereafter and results reported within three months	30 April 2025
Distillery and Seaside Soil Monitoring	3.3.5	First Monitoring completed by Condition 31 January 2025 and results reported within three months. Monitoring every 10 years thereafter and results reported within three months	30 April 2025
Distillery and Seaside Soil and Groundwater Monitoring Methodology	3.3.6	Four months prior to carrying out a monitoring exercise.	30 September 2024

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Sources of Listed Substances and extent to which effluent is liable to contain	3.5.1	One off report	30 April 2025
Quantification of Listed Substances in effluent and options to eliminate priority hazardous substances and reduce priority substances and specific pollutants	3.5.2	One off report	30 April 2026
Air emissions report	4.1.4	Six monthly	31 December 2006
Flare commission monitoring	4.1.4.1	One off report	Within 3 months of commission monitoring
Anaerobic Plant Biogas Flaring Report	4.1.16.6	Quarterly within one calendar month of the end of the period	31 July 2011
Biogas flare air monitoring	4.1.4.2	During commissioning of Flare 4 and within 3 months of exceedance of 876 operational hours for a flare	Within one month of monitoring being carried out.
Emissions to controlled waters	4.2.5	For ammoniacal nitrogen and total suspended solids in Emission Point C the daily composite, daily loading and monthly average results reported quarterly within two weeks of the end of the period until SEPA agrees in writing that this is no longer necessary, and  For all parameters listed in Table 4.6 for Emission Point C, other than ammoniacal nitrogen and total suspended solids, daily composite and monthly average results reported quarterly within 2 weeks of the end of the reporting period and reported annually within 4 weeks of the end of the period	14 July 2024  14 July 2024

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Emissions to controlled waters	4.2.5	For all parameters listed in Table 4.6 for Emission Point D the daily composite and monthly average results reported annually within 4 weeks of the end of the period	31 January 2025
Mass emissions to controlled waters	4.2.7	Annually	31 January 2007
Spillage containment report	4.6.4	One off report	31 December 2024
Drain condition report	4.6.5	Every 5 years	31 December 2025
Assessment into feasibility of increasing storage capacity at the Attenuation & Balance Tank	4.6.6	One off report	31 December 2024
Long Sea Outfall condition report	4.6.7	Every 5 years	31 December 2025
Spent wash tank containment report	4.6.8	One off report	31 December 2024
Annual progress report on reducing emissions to water of TSS, COD, TP & TN	4.6.13	Annual	30 November 2024
Timebound plans for processing all spent wash at the Ladywell anaerobic digestion plant.	4.6.14	One off report	31 December 2026
Review detailing outcome of work to modify distilling process for Girvan North to enable easier processability of feedstock and recovery of nutrients from effluent for use as a fertiliser.	4.6.15	One off report	31 December 2027

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Review of effluent monitoring data for previous 12 months and comparison of performance against ELV's for TSS, COD, TP & TN in Table 4.5 that will apply from 04/12/30. If gaps exist submit a fully costed and timebound plan detailing any further measures necessary to be implemented to achieve compliance with those ELV's	4.6.16	One off report	31 December 2028
Licensed/permitted Site Return Form for the Anaerobic Digestion Plant	5.6.1.1	Annually within one calendar month of the end of the period	31 January 2025
Trial AD new Substrate assessment	6.3.1.1	As required	24 hours prior to first use of a new substrate at the trial AD plant
Trial solubilisation process flaring report	6.6.3	Quarterly within one calendar month of the end of the period	31 July 2013 for Quarter 2 2013 period
Licensed/Permitted Site Return Form for trial solubilisation process	6.6.2	Quarterly within one calendar month of the end of the period	31 July 2013 for Quarter 2 2013 period
Air quality assessment of emissions to air from flare serving the trial solubilisation anaerobic digestion process.	6.7.1	One off report	31 October 2024
Rainwater harvesting assessment	7.8.1	One off report	31 December 2024
Biogas upgrading flaring report	8.3.1	Quarterly within one calendar month of the end of the period.	31 January 2015 for the period ending 31 December 2014
Biogas upgrading annual report	8.3.2	Annually	31 January 2016
Biogas upgrading statement of conformity	8.3.3	Annually	Annual on 31 January each year
Ladywell air monitoring	9.1.5	As required within six weeks of monitoring being carried out	N/A
Ladywell Mass Emissions to Air	9.1.6	Annual within one month of the end of the period	31 January 2016



Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Ladywell Flaring Report	9.1.7	Quarterly within one month of the end of the period.	31 July 2015
Water Sampling Analysis	9.2.5	For all parameters listed in Table 9.4 for Emission Point E the daily composite and monthly average results reported annually within 4 weeks of the end of the period	31 January 2025
Ladywell Sampling Plan	9.2.6	Annual by 31 December of the previous period	31 December 2015
Ladywell Mass Emissions to Water	9.2.7	Annual within one month of the end of the period	31 January 2016
Benthic Survey Results	9.2.9.2	Within 3 months of completion of a survey	31 December 2021
Marine chemistry sampling plan for ammonia, cadmium, chromium and nickel	9.2.10	Annually	31 August 2024
Marine Chemistry Sampling Protocol	9.2.10.1	Before carrying out annual sampling exercise	31 August 2024
Marine Chemistry Sampling Results	9.2.10.2	Within 6 weeks of conducting the marine chemistry sampling exercise	Within 6 weeks of conducting the marine chemistry sampling exercise
Assess impact of adding anaerobic digesters 11 & 12 to dispersed concentrations of ammonia discharged from the long sea outfall	9.2.10.3	One off report	31 August 2024
Assess impact on effluent quality of adding anaerobic digesters 11 and 12 and the new FAN and Atana filter presses	9.2.14	One off report	31 July 2024
Notification of new Ladywell Anaerobic Process substrate	9.3.1.3	Seven days prior to first receipt of each new substrate received at the Ladywell Anaerobic Facility unless advised by SEPA in writing that notification of new substrates is not required.	As required
Ladywell PRV Activation Notification	9.3.5.3.	As required from date of issue of variation 16	N/A

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Ladywell systematic odour review	9.3.11	Every three years	31 April 2018
Ladywell annual report	9.3.12	Annual within one month of the end of the period	31 January 2016
Ladywell Soil and Groundwater Protection Assessment	9.4.1	Every 5 years	30 April 2025
Ladywell Groundwater Monitoring	9.4.2	First monitoring completed by 31 September 2015 and results reported within three months and Monitoring every 5 years thereafter and results reported within three months	31 December 2015
Ladywell Soil Monitoring	9.4.3	Monitoring every 10 years and results reported within three months	31 December 2025
Ladywell Soil and Groundwater Monitoring Methodology	9.4.4	Four months prior to carrying out a monitoring exercise	31 May 2015
Commissioning of carbon dioxide liquefaction plant	9.5.3	One off report	31 October 2024
Commissioning of new FAN and Atana filter presses.	9.5.4	One off report	31 July 2024

7. In Schedule 2, Table 2.3 has been deleted and replaced by a new Table 2.3 as follows:

**Table 2.3 – Raw Materials, Energy and Fuel**

Raw materials, energy or fuel	Unit of measurement
Wheat, malted barley & yeast	t
Water	m <sup>3</sup>
Natural gas	MW/hr
Electricity	MW/hr
Biogas	m <sup>3</sup>
Gas oil	Litres
Hydraulic oil	Litres
Boiler water treatment chemicals	Litres
Peracetic acid	Litres
Caustic soda	Litres
Nitric acid	Litres
Flocculant	Litres
Detergents / disinfectants / sterilants	Litres/kg
Refrigerants	Kg or CO <sub>2</sub> equivalent
HFC	Kg or CO <sub>2</sub> equivalent
Plastic Wrap	Kg
Glycol	t
Ferric Chloride	t

**8. In Schedule 3 the following conditions have been deleted: 3.1.4, 3.1.5, 3.4.2, 3.4.2.1, 3.4.3, 3.4.3.1, 3.4.3.2, 3.4.4, 3.4.5, 3.4.6, 3.4.7, 3.4.7.1 and 3.4.8.**

**9. In Schedule 3, Conditions 3.3.3 – 3.3.8 have been inserted as follows:**

- 3.3.3 At least every five years, the operator shall carry out a systematic assessment of all measures used to prevent emissions from the Permitted Installation to soil and groundwater. A written report of each assessment shall be recorded and reported to SEPA. The report shall include details of and timescales for any additional measures that are required to prevent emissions to soil and groundwater.
- 3.3.4 The Operator shall monitor the groundwater at the site for the relevant hazardous substances specified in Table 3.1 at the frequency specified in Table 3.1, the purpose of which shall be to identify groundwater contamination by those relevant hazardous substances. Each assessment shall be recorded and reported to SEPA. The first assessment shall be submitted no later than 30 April 2025. The assessment shall include interpretation of the results with reference to previous monitoring undertaken (including the site and where applicable baseline reports) and operations at the permitted installation and details of corrective actions that are required to protect groundwater and remedy any contamination that has occurred as a result of permitted activities.
- 3.3.5 The Operator shall monitor the soil at the site for the relevant hazardous substances specified in Table 3.2 at the frequency specified in Table 3.2, the purpose of which shall be to identify soil contamination by those relevant hazardous substances. Each assessment shall be recorded and reported to SEPA. The first assessment shall be submitted no later than 30 April 2025. The assessment shall comply with relevant guidance (specifically including SEPA guidance document IEDTG-42), include interpretation of results with reference to previous monitoring undertaken (including the site and where applicable baseline reports), and operations at the permitted installation, and details of corrective actions that are required to protect soil and remedy any contamination that has occurred as a result of permitted activities.
- 3.3.6 The Operator shall submit a detailed soil and groundwater monitoring plan, for the monitoring required by Conditions 3.3.4 and 3.3.5 to SEPA at least four months in advance of carrying out the monitoring with the first soil and groundwater monitoring plan to be submitted by 30 September 2024. The monitoring plan shall comply with relevant guidance (specifically including SEPA technical guidance document IED-TG-42) and include the locations at which the monitoring shall be carried out and the methodology which shall be used. The monitoring plan shall take account of the systematic assessment required by Condition 3.3.5.

3.3.7 By 30 April 2025, a revised Site Condition and Baseline Report shall be submitted to SEPA. The Baseline report shall be updated and submitted to SEPA to reflect any changes to hazardous substances used on site along with their storage and use locations. The revised Site Condition and Baseline Report will be prepared in accordance with SEPA's PPC Technical Guidance Note 2 (Site Reports), dated 6 December 2013, Guidance No. IED TG02.

3.3.8 Notwithstanding the requirements of Condition 2.2.2 all plans, monitoring and assessment reports undertaken in accordance with Conditions 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7 and 3.3.8 and the revised site condition report and Baseline Report under condition 3.3.7 shall be preserved until the Permit is surrendered.

**10. In Schedule 3, Tables 3.1 & 3.2 have been inserted as follows:**

**Table 3.1 – Groundwater Monitoring Requirements**

Relevant Hazardous Substances	Location	Frequency
<p>As per monitoring plan submitted under Condition 3.3.6 and agreed in writing by SEPA.</p> <p>The monitoring plan shall include as a minimum the following substances: metals and metalloids (arsenic, barium, beryllium, cadmium, cobalt, chromium, copper, mercury, nickel, potassium, lead, selenium, vanadium, zinc), ammoniacal nitrogen, nitrate, nitrite, orthophosphate, sulphate, pH, TPH CWG, BTEX, chloride, total phosphorous, glycol, ethanol, redox potential, BOD and COD.</p>	<p>As per monitoring plan submitted under Condition 3.3.6 and agreed in writing by SEPA.</p> <p>The plan must consider locations of all activities that use, store, produce or release relevant hazardous substances including waste streams.</p>	<p>With first one by 31 January 2025 and thereafter the frequency shall be once every 5 years.</p>

**Table 3.2 – Soil Monitoring Requirements**

Relevant Hazardous Substances	Location	Frequency
<p>As per monitoring plan submitted under Condition 3.3.6 and agreed in writing by SEPA.</p> <p>The monitoring plan shall include as a minimum the following substances: metals and metalloids (arsenic, barium, beryllium, cadmium, cobalt, chromium, copper, mercury, nickel, potassium, lead, selenium, vanadium, zinc), ammoniacal nitrogen, nitrate, nitrite, orthophosphate, sulphate, pH, TPH CWG, BTEX, Chloride, Total Phosphorous, Glycol and Ethanol.</p>	<p>As per monitoring plan submitted under Condition 3.3.6 and agreed in writing by SEPA.</p> <p>The plan must consider locations of all activities that use, store, produce or release relevant hazardous substances including waste streams.</p>	<p>With first one by 31 January 2025 and thereafter the frequency shall be once every 10 years.</p>

**11. In Schedule 3, a new Section 3.5 has been inserted as follows:**

**3.5 Protection of the Water Environment**

3.5.1 The Operator shall identify all potential sources of “Listed Substances”, including those associated with raw materials, fuels, impurities, intermediates, by products, products used in the Permitted installation and wastes and residues generated and assess the extent to which effluent emitted to discharge point C is liable to contain said substances. A list of all substances considered and the basis on which conclusions have been reached regarding their presence in effluent shall be submitted to SEPA by 30 April 2025.

3.5.2 Where it is identified in Condition 3.5.1 that effluent emitted by the Permitted installation is liable to contain “Listed Substances,” a report shall be submitted in writing to SEPA by 30 April 2026 detailing the quantity of each substance with reference to theoretical calculation or quantitative analysis, including in the case of quantitative analysis, details of the analytical and sampling methods used and the limit of detection for each sample matrix tested; options for the elimination of emissions priority hazardous substances to the water Environment by 31 December 2027; and options for the reduction of emissions of priority substances and specific pollutants.

**12. In Schedule 4, the following conditions have been deleted: 4.1.9, 4.1.12, 4.1.15, 4.1.16.1, 4.1.16.2, 4.1.16.3, 4.1.16.4, 4.1.22, 4.1.23, 4.1.24, 4.1.25, 4.1.28, 4.1.28.1, 4.1.28.2, 4.1.29, 4.2.9, 4.2.10, 4.2.11, 4.3.2, 4.3.3, 4.4.3, 4.4.4 and 4.4.5.**

**13. In Schedule 4, Condition 4.1.9 has been added as follows:**

4.1.9 The Operator shall undertake all reasonable steps to ensure periods of start up and shutdown of Medium Combustion Plant are kept as short as possible.

**14. In Schedule 4, the following conditions have been renumbered: 4.1.13 has become 4.1.12, 4.1.14 has become 4.1.13, 4.1.16 has become 4.1.14, 4.1.17 has become 4.1.15, 4.1.18 has become 4.1.16, 4.1.18.1 has become 4.1.16.1, 4.1.18.2 has become 4.1.16.2, 4.1.18.3 has become 4.1.16.3, 4.1.18.4 has become 4.1.16.4, 4.1.18.5 has become 4.1.16.5, 4.1.18.6 has become 4.1.16.6, 4.1.19 has become 4.1.17, 4.1.20 has become 4.1.18, 4.1.21 has become 4.1.19, 4.1.27 has become 4.1.20 and 4.1.27.1 has become 4.1.20.1.**

**15. In Schedule 4, Conditions 4.1.21, 4.1.21.1 and 4.1.21.2 have been added as follows:**

4.1.21 Whenever flare no's 1,2,3,4,5,6 or 7 are in use to combust biogas they shall operate at a minimum operational temperature of 1000°C.

4.1.21.1 On each occasion flare no's 1,2,3,4,5,6 or 7 are operating on biogas and the operational temperature falls below 1000°C an alarm shall be sounded in the control room and the occurrence shall be treated as an incident in accordance with Condition 4.1.18.

4.1.21.2 The operational temperature of flare no's 1,2,3,4,5,6 and 7 shall be continuously monitored and recorded during operation.

**16. In Schedule 4, the following conditions have been deleted:**

**17. In Schedule 4, Condition 4.2.3 is deleted and replaced by a new Condition 4.2.3 as follows:**

4.2.3 Where the limit for any parameter in Table 4.5 is prefixed with CL, CU, A, IL or IU the following Conditions shall apply in respect of that parameter:

**18. In Schedule 4, Condition 4.2.5 is deleted and replaced by a new Condition 4.2.5 as follows:**

4.2.5 The date, time and results of all samples and measurements carried out in compliance with Condition 4.2.4 shall be recorded by the Operator and reported to SEPA.

**19. In Schedule 4, the following conditions have been deleted : 4.6.1 – 4.6.18 have been deleted.**

**20. In Schedule 4, new conditions 4.6.1 – 4.6.9 have been inserted as follows:**

4.6.1 By 31 December 2024 any bulk caustic storage tanks and their fill points shall be contained within an impermeable bund of sufficient capacity to retain 110% of the capacity of a single tank or 25% of the capacity of multiple tanks, whichever is the higher figure.

4.6.2 By 31 July 2024 the ducting serving release points AA1, AA2, AA3, AA4, AA5 and AA6 shall be fitted with sample ports and, where required, an accessible working platform which are compliant with the requirements of BS EN 15259 to allow representative samples to be collected of Total Particulate Matter.

4.6.3 By 31 August 2025 the Operator shall complete work to cease emissions to atmosphere from release points AA1, AA2, AA3 and AA4 and implement any necessary upgrade to the particulate abatement systems serving release points AA5 and AA6 to ensure emissions of Dust meet the emission limit values described in Table 4.1 of the Permit.

4.6.4 By 31 December 2024 a review shall have been undertaken and reported to SEPA in respect of the spillage containment provisions for all liquid raw materials used within the installation. The review shall consider but not be limited to:

- a) the integrity of any bunding present for liquid containment,
- b) the condition and or presence of hard standing out with the bunded area adjacent to the fill points,
- c) the location of the nearest drains or catchpots,



- d) spill containment procedures in the event of an incident occurring,
- e) timescale for remedial action necessary for protection of the environment.

- 4.6.5 Once every five years the operator shall undertake a CCTV survey of all below ground surface and process drains within the boundary of the permitted installation. The survey shall determine the state and route of all the drains within the boundary of the permitted installation, and determine what, if any, remedial action is required to ensure that the drains are free from obstruction and that the integrity of the drains is maintained. The results of the investigation and the proposed actions and timescales to be undertaken as a result of the investigation shall be recorded and reported to SEPA in writing within 2 months of completing the survey.
- 4.6.6 By 31 December 2024 the operator shall review and report back to SEPA on the feasibility of modifying the outfall arrangement at the Attenuation and Balance Tank to determine whether it can be lowered to increase available storage capacity. The report submitted to SEPA shall detail the outcome of the feasibility study together with a timebound plan for completing any feasible modifications.
- 4.6.7 Once every five years the operator shall conduct a survey of the long sea outfall and provide a report on its integrity.
- 4.6.8 By 31 December 2024 the operator shall submit a report containing a timebound improvement plan for the spent wash tank to either provide an impermeable bund of sufficient size to retain 110% of the capacity of the tank or an equivalent measure which will allow full containment of any spillage which might occur.
- 4.6.9 The Operator shall record the flow of wastewater from the anaerobic plants to the ammonia mixing vessel; the flow of wastewater from the effluent sump pumped to the ammonia mixing vessel; the flow of supplementary water to the ammonia balancing system and the final effluent flow. Flow data shall be recorded in terms of daily average flow rates and monthly average flow rates in litres per second.

**21. In Schedule 4, Condition 4.6.19 has been renumbered as Condition 4.6.10.**

**22. In Schedule 4, Condition 4.6.20 has been deleted and replaced by a new Condition 4.6.11 as follows:**

- 4.6.11 No more than 7.5t/day of ammoniacal nitrogen (as N) shall be released from discharge point C as an annual average in any calendar year.

**23. In Schedule 4, Condition 4.6.21 has been renumbered as Condition 4.6.12.**

**24. In Schedule 4, new conditions 4.6.13, 4.6.14, 4.6.15 and 4.6.16 have been inserted as follows:**

4.6.13 By 30 November each year the Operator shall provide a progress report including but not limited to:-

- The outcome of the previous 12 months work at the Midi plant.
- A review of effluent monitoring data gathered for TSS, COD, TN & TP over the previous 12 months in accordance with Condition 4.2.5 and compare performance against the ELV's for TSS, COD, TP & TN in Table 4.5 that will apply from 04 December 2030.
- Overall progress made in the previous 12 months in the implementation of techniques to reduce emissions to water of TSS, COD, TN & TP to achieve compliance with the ELV's for those parameters in Table 4.5 that apply from 04 December 2030.
- Intended plans for reducing emissions to water of TSS, COD, TN & TP over the following 12 month period.

4.6.14 By 31 December 2026 the Operator shall provide timebound plans for processing all spent wash at the Ladywell anaerobic digestion plant.

4.6.15 By 31 December 2027 the Operator shall submit a review detailing the outcome of work to modify the distilling process for Girvan North to enable easier processability of feedstock and recovery of nutrients from effluent for use as a fertiliser.

4.6.16 By 31 December 2028 the Operator shall submit a review of effluent monitoring data for the previous 12 months and compare performance against the ELV's for TSS, COD, TP & TN in Table 4.5 that will apply from 04 December 2030. Where gaps exist a fully costed and timebound plan shall be provided detailing any further measures necessary to be implemented to achieve compliance with those ELV's.

**25. In Schedule 4, Condition 4.7.1 has been deleted.**

**26. In Schedule 4, Condition 4.7.2 has been renumbered as Condition 4.7.1.**

**27. In Schedule 4, Table 4.1 has been deleted and replaced by a new Table 4.1 as follows:**

**Table 4.1 – Emissions to Air ELVs**

Source of Emission	Emission point	H	I	J,K	L	O	R	S	T	U	V	X	X1	Y	Z1	Z2	Z3
	Emission source	Boiler 3	Boiler 9	Boiler 10	CHP	Gas engine No 3 combusting biogas generated by the anaerobic effluent treatment plant described in Paragraph 1.1.4.3 of Schedule 1	Flare No 1 serving basins 1 and 2 of the anaerobic effluent treatment plant described in Paragraph 1.1.4.3 of Schedule 1	Flare No 2 serving basins 3 and 4 of the anaerobic effluent treatment plant described in Paragraph 1.1.4.3 of Schedule 1	Flare No 3 serving the biogas upgrade system described in Paragraph 1.1.5.8 of Schedule 1	Flare No 4 serving the biogas upgrade system described in Paragraph 1.1.5.10 of Schedule 1	Flare No 5 serving the Ladywell anaerobic digestion tanks 11 and 12 described in Paragraph 1.1.4.4 of Schedule 1	Flare No 6 Serving the biogas upgrade system described in Paragraph 1.1.5.8 of Schedule 1	Flare No 7 serving the trial solubilisation anaerobic digestion process (MIDI Plant)	Ladywell biomethane upgrader	Seaside gas to grid biomethane upgrader	Seaside biomethane upgrader / CO2 liquefaction plant	Seaside biomethane upgrader / CO2 liquefaction plant -recharge of drier vessel
	Stack height/diameter (m)	26/0.6	26/0.6	26/0.6	19/1.25	11/0.30	11/2.4	11/2.4	12.4/2.98	8/1.36	8.23/2.44	10.07/2.89	5.1/1.3	15/0.17	15.5/0.2	7.2/0.17	6.8/0.1
	Location on Site Plan	A	A	A	B												
	NGR	NS 2002 0004	NS 2002 0004	NS 2002 0004	NS 2003 0007	NS 2201 0005	NX 1970 9986	NX 1970 9986	NS 1971 0002	NS 2037 0042	NS 2047 0047	NS 1961 0016	NS 1969 0002	NS 2039 0040	NS 1967 0007	NS 1964 0008	NS 1964 0008
Monitoring Details	Type of Monitoring	Periodic Quantitative	Periodic Quantitative	Periodic Quantitative	Periodic Quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative	Periodic quantitative
	Sampling Location	Stack Serving Boiler 3	Stack Serving Boiler 9	Stack Serving Boiler 10	Stack Serving CHP & Waste Heat Boiler	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack	Dedicated stack
	Oxides of Nitrogen as NO2 (natural gas)	140 mg/m3	<75% MCR 100 mg/m3	<75% MCR 140 mg/m3	≥75% MCR 60 mg/m3	500 mg/m3 Until 31/12/29	No limits set	No limits set	No Limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set
			≥75% MCR 100 mg/m3	≥75% MCR 110 mg/m3		190mg/m3 from 01/01/30				No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set
	Sulphur dioxide	No limits set	No limits set	No limits set	No limits set	60mg/m3 from 01/01/30	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set
Carbon Monoxide (natural gas)	100 mg/m3	<75% MCR 100 mg/m3	<75% MCR 100 mg/m3	50 mg/m3	1000 mg/m3	No limits set	No limits set	No Limits Set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	
		≥75% MCR 70 mg/m3	≥75% MCR 70 mg/m3							No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	No limits set	

**Table 4.1 – Emissions to Air ELVs (cont)**

Source of Emission	Emission point	AA1**	AA2**	AA3**	AA4**	AA5	AA6
	Emission source	Grain Millhouse 1 LEV 001 - Fan & Dust Collector RHF	Grain Millhouse 1 LEV 002 - M1F2 Aspiration Filter Main Dust L4	Grain Millhouse 1 LEV 003 - M1SF1 Spot Filter	Grain Millhouse 1 LEV 004 - M1SF2 Spot Filter	Grain Millhouse 1 LEV 005 - M1F1 Head bin Reverse Jet/Dust Filter	Malt Millhouse 2 LEV 011 - General Exhaust Filter L3
	Stack height/ diameter (m)	17.4	15.6	9.4	9.4	8.4	9.1
	Location on Site Plan						
	NGR	NX 2010 9992	NX 2009 9992	NX 2009 9992	NX 2010 9992	NX 2010 9991	NX 2010 9994
Monitoring Details	Type of Monitoring	Periodic Quantitative	Periodic Quantitative	Periodic Quantitative	Periodic Quantitative	Periodic Quantitative	Periodic Quantitative
	Sampling Location	Duct serving release point*	Duct serving release point*	Duct serving release point*	Duct serving release point*	Duct serving release point*	Duct serving release point*
	Dust (mg/m3)	5	5	5	5	5	10

\* From 31 July 2024

\*\* Until 31 August 2025

28. In Schedule 4, Table 4.2 has been deleted and replaced by a new Table 4.2 as follows:

**Table 4.2 – Emissions to Air Monitoring Requirements**

Parameter	Emission point	Spot Sampling (SS)			
		Standard	Frequency	Firing Rate	Operational Mode
Oxides of Nitrogen (as NO <sub>2</sub> )	H,I,J,K,L,O	BS EN 14792 or equivalent as agreed in writing with SEPA	Every 6 months	≥ 75% MCR (Gas) < 75% MCR and ≥75% MCR (Gas)	During Production
Sulphur Dioxide (SO <sub>2</sub> )	O	BS EN 14791	Annual	≥ 75% MCR (Gas) < 75% MCR and ≥75% MCR (Gas)	Operating under stable conditions at a representative even load and not undergoing start up or shut down
CO	H,I,J,K,L,O	BS EN 15058 or equivalent as agreed in writing with SEPA	Every 6 months	< 75% MCR and ≥75% MCR (Gas)	During Production
Hydrogen sulphide	O	US EPA Method 11 or BS EN 13649	At least once every 30 days until 30 September 2009 or such earlier date as may be agreed in writing with SEPA, and at least once every year thereafter	-	-
Oxides of nitrogen as NO <sub>2</sub>	R,S,T,U,V, X & X1	BS EN 14792:2005 or alternative agreed method	Single spot measurement on each flare which operates for greater than 876 hours in any rolling year with the measurement to be carried out within three months of the end of the quarter where 876 operational hours has been exceeded	≥ 75% MCR biogas	During flaring
CO	R,S,T,U,V, X & X1	BS EN 15058:2006 or alternative agreed method	Single spot measurement on each flare which operates for greater than 876 hours in any rolling year with the measurement to be carried out within three months of the end of the quarter where 876 operational hours has been exceeded	≥ 75% MCR biogas	During flaring
Sulphur Dioxide	R,S,T,U,V, X & X1	BS EN 14792, BS EN 14791 or alternative agreed method	Single spot measurement on each flare which operates for greater than 876 hours in any rolling year with the measurement to be carried out within three months of the end of the quarter where 876 operational hours has been exceeded	≥ 75% MCR biogas	During flaring

Parameter	Emission point	Spot Sampling (SS)			
		Standard	Frequency	Firing Rate	Operational Mode
Total VOCs	R,S,T,U,V, X & X1	BS EN 12619# or BS EN 12626## or alternative agreed method	Single spot measurement on each flare which operates for greater than 876 hours in any rolling year with the measurement to be carried out within three months of the end of the quarter where 876 operational hours has been exceeded	≥ 75% MCR biogas	During flaring
Total Particulate Matter	AA1, AA2, AA3, AA4, AA5 & AA6	BS EN 13284-1	Every 12 months	-	During production

29. In Schedule 4, Table 4.3 has been deleted and a replaced by a new Table 4.3 as follows:

**Table 4.3 – Reference Conditions**

Emission point Number	Reference Condition
H, I, J,K	273K, corrected for water, 101.3 KPa, 3% oxygen content
L	273K, corrected for water, 101.3 KPa, 15% oxygen content
O	273K, corrected for water, 101.3 KPa, 15% oxygen content
AA1, AA2, AA3, AA4, AA5 & AA6	273K, 101.3 kPa, wet gas, no correction for oxygen

30. In Schedule 4, Table 4.5 has been deleted and replaced by a new Table 4.5 as follows:

**Table 4.5 – Emissions to Water Environment ELVs**

Source of Emission	Emission point	C	D
	Source of Emission	Surface water and wastewater arising from the manufacture of distilled alcohol products and from anaerobic digestion operations	Combined discharge from the anaerobic effluent treatment plant described in Paragraph 1.1.4.3 of Schedule 1
	Destination	Firth of Clyde	Firth of Clyde via outfall pipe
	Emission location	NS 1852 0095	Common outfall pipe
	Sampling location	NS 1938 0049	Pipe transporting combined effluent from the clarifiers to the outfall pipe prior to combination with (a) effluents that have not been subject treatment in the anaerobic effluent treatment plant described in Paragraph 1.1.4.3 of Schedule 1 and (b) any rainwater
Composite Limits For Parameters From Emission Source	Total suspended solids	A 65 t/day, CL 6100mg/l * (daily average) CU 6500mg/l * (daily average) 50mg/l** (daily average)	-
	Chemical oxygen demand (daily average in mg/l)	CL 10400* CU 10,800* 100mg/l**	-
	Total nitrogen (daily average in mg/l)	CL 1350* CU 1750* 20mg/l**	-
	Total phosphorous (daily average in mg/l)	CL 200* CU 210* 2 **	-
	Dissolved copper passing 45µm filter in ug/l	CL 150 CU 300	-
	Dissolved zinc passing 45µm filter in ug/l	CL 500 CU 1000	-
	Ammoniacal Nitrogen	A 9 t/day	-

<b>Instantaneous Limits For Parameters from Emission Source</b>	<b>Oil</b>	10 mg/l	
	<b>pH</b>	Not less than 3.5 or greater than 9	
	<b>Maximum discharge rate</b>	600m <sup>3</sup> /h	

- \* Until 04 December 2030
- \*\* From 04 December 2030



31. In Schedule 4, Table 4.6 has been deleted and replaced by a new Table 4.6 as follows:

**Table 4.6 – Emissions to Water Monitoring Requirements**

Parameter	Emission (Number(s))	Test Method	Reporting Format	Sampling/ Measurement Facility	Instantaneous	Composite	
					Frequency	Frequency	Sample Basis
Chemical oxygen demand (mg/l)	C	To be agreed in writing with SEPA	Quarterly and annual summary	Composite sampler		Daily	24 hour composite
	D		Annual summary				
Total nitrogen (mg/l)	C	EN 12260, EN ISO 11905-01 or an alternative to be agreed with SEPA	Quarterly and annual summary	Composite sampler		Daily	24 hour composite
	D		Annual summary				
Total phosphorous (mg/l)	C	EN ISO 6878, EN ISO 15681 – 1 and -2 & EN ISO 11885 or an alternative to be agreed with SEPA	Quarterly and annual summary	Composite sampler		Daily	24 hour composite
	D		Annual summary				
Total suspended solids	C	ISO 11929: 1997 EN872 Determination of suspended solids	Quarterly and annual summary	Composite sampler		Daily	24 hour composite
	D		Annual summary				
Cadmium (ug/l)	C	BS 6068:Section 2.60 1998 or an alternative to be agreed with SEPA	Quarterly and annual summary	Composite sampler	-	Monthly	24 hour composite
	D		Annual summary				
Chromium (ug/l)	C	To be agreed in writing with SEPA	Quarterly and annual summary	Composite sampler	-	Monthly	24 hour composite
	D		Annual summary				
Nickel (ug/l)	C	To be agreed in writing with SEPA	Quarterly and annual summary	Composite sampler	-	Monthly	24 hour composite
	D		Annual summary				

Parameter	Emission (Number(s))	Test Method	Reporting Format	Sampling/ Measurement Facility	Instantaneous	Composite	
					Frequency	Frequency	Sample Basis
Flow	C	SCA Estimation of flow and load ISBN 011752364X	Monthly summary	Flow probe	Daily maximum flow	N/A	N/A
Total suspended solids	C and D	To be agreed in writing with SEPA	Quarterly and annual summary	Composite sampler	-	Daily	24 hour composite
BOD ATU mg/l	C	EN 1899-1 ISO 5815: 1989 Water quality determination of biological water demand	Annual summary	Composite sampler	N/A	Monthly	24 hour composite
Chloride (Cl <sup>-</sup> )	C	To be agreed ie EN ISO 10304-1, EN ISO 15682	Quarterly and annual summary	Composite sampling	-	Monthly	24 hour composite
Dissolved copper passing 45µm filter	C and D	To be agreed in writing with SEPA	Annual summary	Composite sampler	At least once per week	At least once per week	24 hour composite
Dissolved zinc passing 45µm filter	C and D	To be agreed in writing with SEPA	Annual summary	Composite sampler	At least once per week	At least once per week	24 hour composite
Oil mg/l	C	Method A – Determination of Hydrocarbon Oils in Waters by Solvent Extraction, IR Absorption and Gravimetry 1983	As appropriate	Manual Sampling	As appropriate (in the presence of visible oil)	N/A	N/A
pH	C	SCA The Measurement of electric conductivity of pH ISBN 0117514284	Annual summary	Manual sampling	Monthly	N/A	N/A
Ammoniacal nitrogen (mg N/l)	C	To be agreed in writing with SEPA	Quarterly and annual summary	Composite sampler	-	Daily	24 hour composite
	D		Annual summary				

**32. In Schedule 4, Table 4.9 has been deleted and replaced by a new Table 4.9 as follows:**

**Table 4.9 – Raw Materials Handling & Storage**

Description of Raw Material	Location of Storage	Method of Storage	Maximum Permitted Quantity	Storage Conditions
Red diesel tank 1	Adjacent to cask storage area	Tank	5200 litres	Double skinned tank
Caustic (dilute & bulk)	Adjacent to cooling towers	2 designated tanks	50 m3	Bunded
Caustic (dilute & bulk)	Adjacent to wash backs	2 designated tanks	12 m3	Bunded
Peracetic acid	Adjacent to wash backs	Tank	12 m3	Bunded
Peracetic acid	Adjacent to wash backs	IBC's	1800 litres	Bunded
Ferric Chloride	Seaside anaerobic digestion plant	Tank	30m3	Bunded

**33. In Schedule 5, Condition 5.6.1.1 has been deleted and replaced by the following new Condition 5.6.1.1:**

5.6.1.1 A copy of the completed form shall be submitted within 31 days of the end of each annual period.

**34. In Schedule 6, Condition 6.2.1 has been deleted.**

**35. In Schedule 6, Condition 6.2.2 has been renumbered as Condition 6.2.1.**

**36. In Schedule 6 the following conditions from Section 6.7 have been deleted: 6.7.1, 6.7.1.1, 6.7.2, 6.7.3, 6.7.4, 6.7.4.1, ,6.7.6, 6.7.7,6.7.8, 6.7.8.1.**

**37. In Schedule 6, a new Condition 6.7.1 has been inserted as follows:**

6.7.1 By 31 October 2024 the Operator shall submit an air quality assessment report of emissions from when the flare serving the trial solubilisation anaerobic digestion process is in operation.

**38. In Schedule 6, Condition 6.7.5 has been renumbered as Condition 6.6.3.**

**39. In Schedule 7, Conditions 7.8.1, 7.8.2, 7.8.2.1 and 7.8.3 have been deleted.**

**40. In Schedule 7 a new Condition 7.8.1 has been inserted as follows:**

7.8.1 By 31 December 2024 the operator shall submit a study assessing the feasibility of harvesting rainwater.

- 41. In Schedule 8 the following conditions from Section 8.4 have been deleted: 8.4.1, 8.4.2, 8.4.3, 8.4.4, 8.4.4.1, 8.4.5 and 8.4.6.**
- 42. In Schedule 9, Condition 9.2.10 has been deleted and replaced by a new Condition 9.2.10 as follows:**
- 9.2.10 By 31 August 2024 a marine chemistry sampling plan shall be agreed in writing with SEPA to determine the dispersed concentrations of ammonia, cadmium, chromium and nickel discharged from the long sea outfall. Said sampling plan shall be maintained, reviewed annually and reported each year for the forthcoming Calendar year.
- 43. In Schedule 9, Conditions 9.2.10.1 and 9.2.10.2 have been deleted and replaced as follows:**
- 9.2.10.1 The protocol for conducting marine chemistry sampling required by Condition 9.2.10 shall be agreed in writing with SEPA prior to the survey being carried out.
- 9.2.10.2 Within six weeks of conducting the marine chemistry sampling survey, the Operator shall submit to SEPA the marine chemistry sampling reports for the surveys carried out by Condition 9.2.10.
- 44. In Schedule 9, the following conditions from Section 9.5 have been deleted: 9.5.2, 9.5.2.1, 9.5.3, 9.5.3.1, 9.5.4, 9.5.5, 9.5.6, 9.5.6.2, 9.5.6.3, 9.5.6.4, 9.5.7, 9.5.8 and 9.5.9.**
- 45. In Schedule 9, Condition 9.5.1 has been deleted and replaced as follows:**
- 9.5.1 The Operator shall calculate monthly within 24 hours of the end of the relevant period the monthly average of daily composite ammoniacal nitrogen analytical results from emission point C for that monthly period and shall record that average.
- 46. In Schedule 9, Condition 9.5.6.1 has been deleted and replaced by a new Condition 9.5.2 as follows:**
- 9.5.2 The average and maximum flow treated on the trial filters (percentage of Ladywell wastewater flow before any water addition at filtration and m<sup>3</sup>/h) shall be recorded.
- 47. In Schedule 9, Condition 9.5.9 has been deleted and replaced by a new Condition 9.5.3 as follows:**
- 9.5.3 By 31 October 2024 the Operator shall submit a report detailing the outcome of work to commission the carbon dioxide liquefaction system.

**48. In Schedule 9, Condition 9.5.10 has been deleted and replaced by a new Condition 9.5.4 as follows:**

9.5.4 By 31 July 2024 the Operator shall submit a report detailing the outcome of work to commission the new FAN and Atana presses. Said report shall explain how the performance in removal of total suspended solids from the effluent has been optimised and identify any further opportunities for improvement.

**49. In Schedule 9, Table 9.4 has been deleted and replaced by a new Table 9.4 as follows:**

**Table 9.4 – Emissions to Water Environment/Sewer Monitoring Requirements**

Parameter	Emission Number(s)	Test Method	Reporting	Sampling/ Measurement Facility	Instantaneous	Composite	
					Frequency	Frequency	Sample Basis
Flow	E	SCA Estimation of flow and load ISBN 011752364X	Annual summary	Flow probe	Continuous	N/A	N/A
Total suspended solids (mg/l)	E	ISO 11929: 1997 EN872 Determination of suspended solids	Annual summary	Composite sampler	N/A	Daily	24 hour composite
Chemical oxygen demand (mg/l)	E	To be agreed in writing with SEPA	Annual summary	Composite sampler	N/A	Daily	24 hour composite
Total phosphorous (mg/l)	E	EN ISO 6878, EN ISO 15681 – 1 and -2 & EN ISO 11885 or an alternative to be agreed with SEPA	Annual summary	Composite sampler		Daily	24 hour composite
Total Nitrogen (mg/l)	E	EN 12260, EN ISO 11905-01 or an alternative to be agreed with SEPA	Annual summary	Composite sampler		Daily	24 hour composite
Cadmium (ug/l)	E	BS 6068:Section 2.60 1998 or an alternative to be agreed with SEPA	Annual-summary	Composite sampler		Monthly	24 hour composite
Chromium (ug/l)	E	To be agreed in writing with SEPA	Annual summary	Composite sampler		Monthly	24 hour composite
Nickel (ug/l)	E	To be agreed in writing with SEPA	Annual summary	Composite sampler		Monthly	24 hour composite
Total suspended solids	F	ISO 11929: 1997 EN872 Determination of suspended solids	Annual summary	Rep-resentative sample	Daily	N/A	N/A

Parameter	Emission Number(s)	Test Method	Reporting	Sampling/ Measurement Facility	Instantaneous	Composite	
					Frequency	Frequency	Sample Basis
Cu mg/l	E	BS 6068: Section 2.60 1998	Annual summary	Composite sampler	N/A	Daily	24 hour composite
Bioavailable copper	E	To be agreed with SEPA	Annual summary	Composite sampler	N/A	Daily	24 hour composite
Zn mg/l	E	BS 6068: Section 2.60 1998	Annual summary	Composite sampler	N/A	Monthly (up until 30 Sep 2007)	24 hour composite
Oil mg/l	F	Method A — Determination of Hydrocarbon Oils in Waters by Solvent Extraction, IR Absorption and Gravimetry 1983	As appropriate	Rep-resentative sample	Daily	N/A	N/A
pH	E	SCA The Measurement of electric conductivity of pH ISBN 0117514284	Annual summary	Rep-resentative sample	Monthly	N/A	N/A
pH	F	SCA The Measurement of electric conductivity of pH ISBN 0117514284	Annual summary	Rep-resentative sample	Daily	N/A	N/A
Ammoniacal nitrogen (mg /l)	E	To be agreed in writing with SEPA	Annual summary every year	Composite sampler	-	Daily	24 hour composite
Dissolved zinc passing 45µm filter	E	To be agreed in writing with SEPA	Annual summary	Composite sampler	N/A	At least once per week	24 hour composite

**50. The following annex has been added to the Permit as follows:**

**Annex 1 – Derogation Details**

**X.1 The Regulation**

Regulation 25(6) of the Regulations provides that SEPA must include emission limit values that ensure that emissions do not exceed the levels associated with the best available techniques (BAT-AEL) laid down in the BAT Conclusions.

Regulation 25(12) of the Regulations states:

“SEPA may set a less strict emission limit value... for an installation if –

- (a) an assessment shows that achievement of the emission levels associated with the best available techniques as described in any BAT Conclusions would lead to disproportionately higher costs compared to environmental benefits due to the –
  - i) the geographical location or local environmental conditions of the installation, or
  - ii) technical characteristics of the installation, ...”

Regulation 25(2)(c) provides that where a less strict value is set ("derogation"); it is a requirement that "the permit specifies the reasons for setting the value, including the result of the assessment and the justification for the conditions imposed". The purpose of this Appendix is to satisfy those requirements.

**X.2 The Derogation Used**

SEPA has decided to set ELV's that derogate from the BAT-AEL range in the BAT Conclusions in respect of total suspended solids (TSS), chemical oxygen demand (COD), total nitrogen (TN) & total phosphorous (TP).

Parameter	BAT-AEL <sup>1</sup> (daily average in mg/l)	Derogated ELV Lower Tier (95%ile) (daily average in mg/l)	Derogated ELV Upper Tier (99%ile) (daily average in mg/l)
Total suspended solids (TSS)	50**	6100*	6500*
Chemical oxygen demand (COD)	100**	10400*	10,800*
Total nitrogen (TN)	20**	1350*	1750*
Total phosphorous (TP)	2**	200*	210*

<sup>1</sup> BAT-AEL as specified in Table 1 to the Food, Drink & Milk Industries BAT Conclusions

\* Until 4 December 2030

\*\* From 4 December 2030

### **X.3 Basis for the Derogation**

SEPA has set this emission limit value on the grounds that achievement of emissions within the BAT-AEL range would lead to disproportionately higher costs compared to environmental benefits due to the technical characteristics of the installation:

The technical characteristics of the installation mean that achievement of total suspended solids, chemical oxygen demand, total phosphorous & total nitrogen emissions within the BAT-AEL range would lead to disproportionately higher costs due to the need to:

- i. atypical cross media impacts would arise whereby reducing the emissions of one pollutant increase the emissions of another;
- ii. the configuration of the plant within the site results in practical difficulties and increased costs, including lack of space for the construction of additional plant;
- iii. the history of recent investment in techniques designed to reduce emissions

A Cost Benefit Analysis conducted by SEPA based on applicant data gave the result that achievement of emissions for total suspended solids, chemical oxygen demand, total phosphorous & total nitrogen within the BAT-AEL range would lead to disproportionately higher costs for the reasons given above.

### **X.4 Justification for the Conditions Imposed**

SEPA has included two tier composite ELV's for total suspended solids (CL of 6100 mg/l & CU of 6500mg/l), chemical oxygen demand (CL of 10,400mg/l & CU of 10,800mg/l), total nitrogen (CL of 1350mg/l & CU of 1750mg/l) & total phosphorous (CL of 200mg/l & CU of 210mg/l) on the grounds that SEPA considers it :-

1. represents current BAT for the installation;
2. Reflects current plant operating capabilities;
3. Ensures no significant pollution of the environment will be caused and that a high level of protection of the environment as a whole will be achieved; and
4. The derogation is time limited until 4 December 2030. There is projected to be a phased reduction in emissions to water during the period of the derogation.