

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

TECHNICAL AMENDMENT C
To
INDUSTRIAL EMISSIONS LICENCE

Licence Register Number:	W0205-01
Company Register Number:	266930
Licensee:	Green Circular Economy Unlimited Company
Location of Installation:	Crag Avenue Clondalkin Industrial Estate Clondalkin County Dublin

Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of Licence Reg. No. W0205-01 granted on 28 May 2007, Section 76A(11) Amendment granted on 16 December 2015, Technical Amendment A granted on 29 June 2016, Technical Amendment B granted on 14 July 2021 and as well as any amendments noted herein, any emissions from the activity will comply with and not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

The Agency has applied the Commission Implementing Decision of 10 August 2018 establishing Best Available Techniques (BAT) Conclusions, under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions, for waste treatment (CID 2018/1147) as a reference when setting licence conditions and schedules.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activities individually or in combination with other plans or projects are likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites: Rye Water Valley/Carton SAC (001398), Glenasmole Valley SAC (001209), Wicklow Mountains SAC (002122), South Dublin Bay SAC (000210), North Dublin Bay SAC (000206), South Dublin Bay and River Tolka Estuary SPA (004024), Wicklow Mountains SPA (004040) and North Bull Island SPA (004006).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

This determination is based on the following reasons:

- the installation is not located within any European site,
- this amendment is for the purposes of updating the licence to ensure compliance with the Commission Implementing Decision for Waste Treatment (CID 2018/1147). This amendment updates the licence conditions and maintains or tightens the emission limit values to ensure the operation of the installation is in line with the latest developments in best available techniques (BAT) and to achieve a high level of protection of the environment, and
- the proposed changes do not substantially change the nature or extent of the operations at the installation.

Technical Amendment

In pursuance of the powers conferred on it by Section 96(1)(c) of the Environmental Protection Agency Act 1992 as amended, the Agency amends the licence, granted to Green Circular Economy Unlimited Company, for an installation located at Crag Avenue, Clondalkin Industrial Estate, Clondalkin, County Dublin.

Henceforth, the licence must be read in conjunction with Section 76A(11) Amendment issued on 16 December 2015, Technical Amendment A issued on 29 June 2016, Technical Amendment B issued on 14 July 2021 and the amendments set out below.

This technical amendment is limited to the following: Glossary of Terms, Conditions and Schedules:

Amendments

Amended Glossary of Terms

Insert the following into the Glossary of Terms, of the existing licence or where relevant replace the existing term:

All terms in this amendment should be interpreted in accordance with the definitions in the Environmental Protection Agency Act 1992 as amended, unless otherwise defined in the glossary.

Accident	For the purpose of this licence an accident means an unplanned event that may result in pollution.
Air lock system	A system of two doors, one or other of which is closed at all times, that permits the delivery of waste whilst minimising the escape of fugitive emissions from the waste building.
Approval	Approval in writing/electronically.
BAT	Best Available Techniques (BAT), as described in the Commission Implementing Decision (CID) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment (2018/1147), under Directive 2010/75/EU of the European Parliament and of the Council. Reference to BAT numbers in the conditions of this licence are references to the BAT Conclusions according to how they are numbered in the aforementioned CID.
Channelled emissions	Emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open-top biofilters.
CID	Commission Implementing Decision (CID) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council.
Continuous measurement	Measurement using an 'automated measuring system' permanently installed on site.
Diffuse emissions	Non-channelled emissions which can result from 'area' sources (e.g. tanks) or 'point' sources (e.g. pipe flanges).
Direct discharge	Discharge to a receiving water body without further downstream waste water treatment.
Existing plant	A plant that is not a new plant.
Fugitive emissions	Diffuse emissions from 'point' sources.
Groundwater	Has the meaning assigned to it by Regulation 3 of the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010), as amended.
Hazardous waste	Hazardous waste as defined in point 2 of Article 3 of Directive 2008/98/EC.

Incident	The following must constitute an incident for the purposes of this licence: (a) an emergency; (b) any emission which does not comply with the requirements of this licence; (c) any malfunction or breakdown of key environmental abatement, control or monitoring equipment; (d) any exceedance of the daily duty capacity of the waste handling equipment; (e) any trigger level specified in this licence which is attained or exceeded; and (f) any indication that environmental pollution has, or may have, taken place.
Indirect discharge	Discharge which is not a direct discharge.
Industrial waste water	Any waste water that is discharged from premises used for carrying on any trade or industry or other non-domestic use and excludes run-off rain water as defined by European Union (Waste Water Discharge) Regulations 2020, SI 214/2020.
List of Wastes (LoW)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2014/955/EU, as amended by any subsequent amendment published in the Official Journal of the European Community.
New plant	A plant first permitted at the site of the installation following the publication of the CID 2018/1147 or a complete replacement of a plant following the publication of the CID 2018/1147.
Odour concentration	Number of European Odour Units (OU _E) in one cubic metre at standard conditions measured by dynamic olfactometry according to EN 13725.
Odour control system	Includes the biofilter, ducting, fans for inducing negative pressure in buildings and vessels, the main building, the fibre store building and outdoor vessels used for the storage of incoming waste.
Odour-sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other premises or area of high amenity which for its proper enjoyment requires the absence of odour at nuisance levels.
On-site verification of waste	Rapid check methods to confirm that a waste is the same as that which has been subjected to compliance testing and that which is described in any accompanying documents. It may merely consist of a visual inspection of a load of waste before and after unloading at the installation.
Output	The treated waste exiting the waste treatment plant.
Periodic measurement	Measurement at specified time intervals using manual or automated methods.
Potential emissions	Emissions which take place only under abnormal operating conditions. Examples include emissions from overpressure valves, bursting discs, and emergency generators.
Recovery	Recovery as defined in Article 3(15) of Directive 2008/98/EC.
Residual Waste	The fraction of collected waste remaining after a treatment or diversion step, which generally requires further treatment or disposal, including mixed municipal waste.

Residues management plan	A residues management plan is part of the EMS (see BAT 1) and is an asset of measures to (1) minimise the generation of residues arising from the treatment of waste; (2) optimise the reuse, regeneration, recycling and/or recovery of energy of the residues, and (3) ensure the proper disposal of residues.
Sensitive receptor	Area which needs special protection, such as: - residential areas; - areas where human activities are carried out (e.g. neighbouring workplaces, schools, daycare centres, recreational areas, hospitals or nursing homes).
SPA	Special Protection Area designated under the Birds Directive, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
Uisce Éireann	Uisce Éireann, Colvill House, 24/26 Talbot Street, Dublin 1.
Waste holder	Waste holder as defined in Article 3(6) of Directive 2008/98/EC of the European Parliament and of the Council.
Waste input	The incoming waste to be treated in the waste treatment plant.
Water-based liquid waste	Waste consisting of aqueous liquids, acids/alkalis or pumpable sludges (e.g. emulsions, waste acids, aqueous marine waste) which is not liquid biodegradable waste.

Amended Conditions

Replace Condition 1.1, of the existing licence with the following:

- 1.1 Industrial Emissions Directive activities at this installation must be restricted to those listed and described in *Part I Schedule of Activities Licensed* and must be as set out in the licence application or as modified under Condition 1.5 of this licence and subject to the conditions of this licence.

Replace Condition 1.6, of the existing licence with the following:

- 1.6 This licence is for the purpose of IE licensing under the EPA Act 1992 as amended only and nothing in this licence must be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.

Replace Conditions 2.1 and 2.2, of the existing licence with the following:

2.1 Installation Management

- 2.1.1 The licensee must employ a suitably qualified and experienced installation manager who must be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced deputy must be present on the installation at all times during its operation or as otherwise required by the Agency.
- 2.1.2 The licensee must ensure that personnel performing specifically assigned tasks must be qualified on the basis of appropriate education, training and experience as required and must be aware of the requirements of this licence.

2.2 Environmental Management System (EMS)

- 2.2.1 The licensee must maintain and implement an Environmental Management System (EMS), within six months of date of grant of this Technical Amendment. The EMS must be reviewed by senior management for suitability, adequacy and effectiveness and updated on an annual basis.
- 2.2.2 The EMS must include, as a minimum, the following elements:
- 2.2.2.1 A statement of the commitment, leadership and accountability of management, including senior management for the implementation of an effective EMS.
 - 2.2.2.2 An environmental policy, defined by Management, that includes a commitment to continuous improvement of the environmental performance of the installation.
 - 2.2.2.3 Management and reporting structure and responsibility for environmental aspects, including for the planning and provision of financial and human resources to manage and implement the EMS.
 - 2.2.2.4 An analysis of the organisation's regulatory and environmental obligations, including the potential risks to the environment from the activity.
 - 2.2.2.5 Waste stream management using all of the techniques listed in BAT 2 of CID 2018/1147, within six months of date of grant of this Technical Amendment.

- 2.2.2.6 The maintenance of an inventory of waste water and waste gas streams that incorporates all of the features in BAT 3 of CID 2018/1147.
- 2.2.2.7 An accident and incident management plan using all of the techniques listed in BAT 21 of CID 2018/1147, within twelve months of date of grant of this Technical Amendment.
- 2.2.2.8 If expected or substantiated, an odour management plan that incorporates all of the elements listed in BAT 12 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 2.2.2.9 The maintenance of a residues management plan to reduce the quantity of waste sent for disposal, to be done in accordance with BAT 24 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 2.2.2.10 The procedures required by this licence, including procedures for:
- (a) ensuring compliance with environmental legislation,
 - (b) ensuring employee awareness of and involvement in complying with environmental legislation, and
 - (c) checking performance and developing performance indicators by sectoral benchmarking on a regular basis, including for energy efficiency.
- 2.2.2.11 Schedule of Environmental Objectives and Targets
- The licensee must update and implement a Schedule of Environmental Objectives and Targets. The schedule must, as a minimum, provide for a review of all operations and processes, as referred to in the conditions of this licence, including an evaluation of practicable options for:
- (a) energy and resource efficiency,
 - (b) the reduction in water consumption,
 - (c) the use of cleaner technology, cleaner production,
 - (d) odour and noise management,
 - (e) the prevention, reduction and minimisation of waste including waste reduction targets,
 - (f) the impacts from eventual decommissioning of the installation, and
 - (g) a monitoring and measurement programme.
- The Schedule must include time frames for the achievement of set targets and must address a five-year period as a minimum. The Schedule must be reviewed annually.
- 2.2.2.12 Environmental Management Programme (EMP)
- The licensee must update and implement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.11 of this licence. The EMP must include:
- (a) designation of responsibility for targets,
 - (b) the means by which they may be achieved, and
 - (c) the time within which they may be achieved.
- The EMP must be reviewed annually.

A report on the programme, including the success in meeting agreed targets and an evaluation of non-conformities and associated corrective actions and the potential for further non-conformities to occur must be prepared and submitted to the Agency as part of the AER. Such reports must be retained on-site for a period of not less than seven years and must be available for inspection by authorised persons of the Agency.

2.2.2.13 Documentation

- (a) The licensee must update and implement an environmental management documentation system.
- (b) The licensee must issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.14 Corrective and Preventative Action

- (a) The licensee must update and implement procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence must be defined.
- (b) Where a breach of one or more of the conditions of this licence occurs, the licensee must without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- (c) All corrective and preventative actions must be documented.

2.2.2.15 Internal Audits

- (a) The licensee must establish and implement a programme for independent internal audits of the EMS.
- (b) Such audits must be carried out at least once every three years.
- (c) The audit programme must determine whether or not the EMS is being implemented and maintained properly, and in accordance with the requirements of this licence.
- (d) Audit reports and records of the resultant corrective and preventative actions must be maintained as part of the EMS in accordance with Condition 2.2.2.13 of this licence.

2.2.2.16 Awareness, Training and Competence

The licensee must update and implement procedures for identifying training needs, and for providing appropriate training and communication to all personnel whose work can have a significant effect upon the environment to ensure awareness and competence in their work area. Appropriate records of training must be maintained.

2.2.2.17 Public Awareness and Communications Programme

- (a) The licensee must update and implement a Public Awareness and Communications Programme to ensure that members of the public can obtain information at the installation, at all reasonable times, concerning the environmental performance of the installation.

- (b) The programme must be approved by the Agency and a report on the programme must be prepared and submitted to the Agency annually.

2.2.2.18 Maintenance Programme

- (a) The licensee must update and implement a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment.
- (b) Appropriate record keeping and diagnostic testing must support this maintenance programme.
- (c) The licensee must clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1).
- (d) The maintenance programme must use appropriate techniques and measures to ensure the optimisation of energy efficiency in plant and equipment.

2.2.2.19 Efficient Process Control

- (a) The licensee must update and implement a programme to ensure there is adequate control of processes under all modes of operation.
- (b) The programme must identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters.
- (c) Abnormal process operating conditions must be documented and analysed to identify any necessary corrective action.

New Conditions

Append the following to Condition 3, of the existing licence:

- 3.27 The licensee must ensure that all infrastructure and all equipment required under this licence has been and is:
- (a) installed,
 - (b) commissioned,
 - (c) present on site, and
 - (d) maintained in full working order in accordance with the manufacturer's guidelines for routine servicing and risk assessments.
- 3.28 Where any Condition/Schedule of this licence specifies any later deadline for installation of any piece of infrastructure or equipment, Condition 3.27 must apply as and from the deadline specified.

Amended Condition

Replace Condition 5.4, of the existing licence with the following:

- 5.4 Emissions, including emissions giving rise to odours, from the activities carried on at the site must not result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.

New Conditions

Append the following to Condition 6, of the existing licence:

- 6.28 For relevant emissions to water as identified by the inventory of waste water streams (see BAT 3), the licensee must monitor key process parameters (e.g. waste water flow, pH, temperature, conductivity, and BOD) at key locations (e.g. at the inlet and /or outlet of the pretreatment, at the inlet to the final treatment, at the point where the emissions leaves the installation) in accordance with BAT 6 of CID 2018/1147 and *Schedule C.3.2 Monitoring of Emissions to Sewer* of this licence, within six months of date of grant of this Technical Amendment.
- 6.29 Odour Management Plan
- 6.29.1 If odour is expected or substantiated, the licensee must prepare, maintain and implement, to the satisfaction of the Agency, an Odour Management Plan, in line with the elements listed in BAT 12 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 6.29.2 The plan must be submitted to the Agency within six months of the date of grant of this Technical Amendment.
- 6.29.3 The plan must outline odour reduction and abatement measures.
- 6.29.4 The plan must ensure all potential sources of odour at the installation are identified and potentially odorous emissions and nuisance caused by odour are prevented. The plan must as a minimum address the odour abatement system and the storage and handling of wastes and other materials with a potential for causing odour.
- 6.29.5 The plan must be prepared in accordance with the 'Odour Emissions Guidance Note (Air Guidance Note AG9)' as may be amended or replaced by the Agency.
- 6.29.6 The plan must be reviewed annually.
- 6.30 Odour
- 6.30.1 The licensee must carry out a weekly odour survey of the site operations.
- 6.30.2 The licensee must use one or a combination of the techniques listed in BAT 13 of CID 2018/1147 in order to prevent or, where that is not practicable to reduce odour emissions, within six months of date of grant of this Technical Amendment.
- 6.30.3 The odour survey programme must be undertaken in accordance with the methodology specified in 'Air Guidance Note 5 (AG5) Odour Impact Assessment Guidance for EPA Licensed Sites' as may be amended or replaced by the Agency.

- 6.31 The licensee must prepare, maintain and implement a programme, to the satisfaction of the Agency, for the identification and reduction of diffuse emissions to air using an appropriate combination of best available techniques listed in BAT 14 of CID 2018/1147, within six months of date of grant of this Technical Amendment. This programme must be included in the Environmental Management Programme.
- 6.32 The licensee must use one or a combination of the techniques listed in BAT 18 of CID 2018/1147, to minimise noise emissions, within six months of date of grant of this Technical Amendment.
- 6.33 To reduce emissions to water, the licensee must treat waste water using an appropriate combination of the techniques listed in BAT 20 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 6.34 To use materials efficiently, the licensee must substitute materials with waste in accordance with BAT 22 of CID 2018/1147, within six months of date of grant of this Technical Amendment.

Amended Condition

Replace Condition 7.3, of the existing licence with the following:

- 7.3 The licensee must identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible, using an appropriate combination of the techniques listed in BAT 19 of CID 2018/1147, within six months of date of grant of this Technical Amendment. To optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, reductions in water usage must be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.

New Conditions

Append the following to Condition 7, of the existing licence:

- 7.5 The licensee must monitor the consumption of water, energy and raw materials, as well as the generation of residues and wastewater annually, in accordance with the techniques listed in BAT 11 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 7.6 To use energy efficiently, the licensee must use both of the techniques listed in BAT 23 of CID 2018/1147, within six months of date of grant of this Technical Amendment.

Append the following to Condition 8, of the existing licence:

- 8.3.12 To improve the overall environmental performance, the licensee must monitor the waste input as part of the waste pre-acceptance and acceptance procedures (refer to BAT 2 and BAT 42 of CID 2018/1147).
- 8.14.2 To reduce the environmental risk associated with the storage of waste, the licensee must use all the techniques listed in BAT 4 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 8.17 The licensee must establish and implement waste handling and transfer procedures in accordance with BAT 5 of CID 2018/1147, within six months of date of grant of this Technical Amendment.

- 8.18 To reduce quantity of waste sent for disposal, the licensee must use one or both of the techniques listed in BAT 43 of CID 2018/1147, within six months of date of grant of this Technical Amendment.
- 8.19 To reduce emissions of organic compounds to air, the licensee must apply BAT is to apply BAT 14d and to use one or a combination of the techniques given in BAT 44 of the CID 2018/1147/EU, within six months of date of grant of this Technical Amendment.

Append the following to Condition 11, of the existing licence:

- 11.17 The licensee must submit the reports, proposals and submissions required by this licence by the deadlines specified. The licensee will not be in compliance with the requirements of this condition unless and until it has submitted every report, proposal and submission, the deadline for which has passed.
- 11.18 The licensee must carry out every action required by the Agency, and arising out of such reports, proposals or submissions, by such deadline as the Agency may specify. The licensee will not be in compliance with the requirements of this condition unless and until it has carried out every such action.
- 11.19 The licensee must identify the technique, or combination of techniques where required, used for each BAT referenced in the Waste Treatment CID 2018/1147. The licensee must prepare a report setting out the selected technique(s) used and submit this report along with the AER.

Amended Schedule

SCHEDULE B: Emission limits

Replace Schedules B.3 Emission to Sewer, of the existing licence with the following:

B.3 Emission to Sewer

Emission Point Reference No.: SE1

Location: Near site entrance to Crag Avenue, prior to connection to sewer, as agreed by the Agency

Volume to be emitted: Maximum in any one day: 10 m³
Maximum rate per hour: 1 m³

Parameter	Emission Limit Value ^{Note 1, 2}		
Temperature	42°C (max.)		
pH	6-10		
	Grab Sample mg/l	Daily Mean Concentration mg/l	Daily Mean Loading kg/day
BOD	2,000	1,500	15
COD	8,000	6,000	60
Suspended Solids	2,000	1,500	15
Sulphates (as SO ₄)	500	400	4.0
Detergents (as MBAS)	100	100	1.0
Oils, fats & greases	200	100	1.0
Phosphates (as PO ₄ -P)	100	100	1.0
Mineral Oil	10	10	0.10
Hydrocarbon oil index (HOI)		10	
Arsenic ^{Note 3}		0.05	

Cadmium ^{Note 3}		0.05	
Chromium ^{Note 3}		0.15	
Copper ^{Note 3}		0.5	
Lead ^{Note 3}		0.1	
Nickel ^{Note 3}		0.5	
Mercury ^{Note 3}		5 µg/l	
Zinc ^{Note 3}		1	

Note 1: The averaging periods are defined in the general considerations.

Note 2: The BAT-AELs may not apply if the downstream waste water treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment.

Note 3: The monitoring only applies when the substance concerned is identified as relevant in the waste gas stream based on the inventory mentioned in BAT 3.

SCHEDULE C: Control and Monitoring

Replace Schedules C.1.2 Monitoring of Emissions to Air, of the existing licence with the following:

C.1.2 Monitoring of Emissions to Air

Mass Emissions to Air

Emission Point Reference No.: Re-refining of waste oil/fats emission points

Parameter	Monitoring Frequency	Analysis Method/Technique <small>Note 2, 3</small>
Flow	Quarterly	Flow meter with recorder
Hydrogen chloride <small>Note 1</small>	Biannually	EN Standard Method
Ammonia <small>Note 1</small>	Biannually	Standard Method
Total volatile organic carbon <small>Note 1</small>	Biannually	EN Standard Method
Methanol from process and emergency vents and storage tanks	Quarterly	A) The mass of methanol transferred into the methanol storage tanks shall be estimated and recorded weekly. B) An estimate of the releases of methanol due to working loses shall be calculated as agreed by the Agency. C) An estimate of the releases of methanol due to standing loses shall be calculated as agreed by the Agency.

Note 1: The monitoring only applies when the substance concerned is identified as relevant in the waste gas stream based on the inventory mentioned in BAT 3.

Note 2: BAT is to monitor emissions to air with at least the frequency given, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Note 3: Sampling must take place on alternate week days on a rolling basis to ensure representative samples are obtained for site operations which may vary across the working week.

Replace Schedule C.3.2 Monitoring of Emissions to Sewer, of the existing licence with the following:

C.3.2 Monitoring of Emissions to Sewer

Emission Point Reference No.: SE1

Parameter	Monitoring Frequency	Analysis Method/Technique Note 4, 5, 6
Flow	Continuous	On-line flow meter with recorder
Temperature	Monthly ^{Note 2}	Thermometer
pH	Monthly ^{Note 2}	pH electrode/meter and recorder
Biochemical oxygen demand	Monthly ^{Note 1}	EN Standard Method
Chemical oxygen demand	Monthly ^{Note 1}	Standard Method
Suspended solids	Monthly ^{Note 1}	EN Standard Method
Sulphates (as SO ₄)	Monthly ^{Note 1}	Standard Method
Oils, fats & greases	Monthly ^{Note 1}	Standard Method
Mineral oils	Monthly ^{Note 2}	Standard Method
Detergents (as MBAS)	Monthly ^{Note 1}	Standard Method
Phosphates (as PO ₄ -P)	Monthly ^{Note 1}	Standard Method
Hydrocarbon oil index (HOI) ^{Note 7}	Monthly	EN Standard Method
Arsenic ^{Note 3, 7}	Monthly	EN Standard Method
Cadmium ^{Note 3, 7}	Monthly	EN Standard Method
Chromium ^{Note 3, 7}	Monthly	EN Standard Method
Copper ^{Note 3, 7}	Monthly	EN Standard Method
Nickel ^{Note 3, 7}	Monthly	EN Standard Method
Lead ^{Note 3, 7}	Monthly	EN Standard Method
Zinc ^{Note 3, 7}	Monthly	EN Standard Method
Mercury ^{Note 3, 7}	Monthly	EN Standard Method

PFOA <small>Note 3</small>	Bi-annually	Standard Method
PFOS <small>Note 3</small>	Bi-annually	Standard Method

- Note 1:** The licensee must install a composite sampler prior to commencement of the Scheduled Activity of this licence. All samples thereafter must be collected on a 24 hour flow proportional composite sampling basis.
- Note 2:** Sample to be obtained by discrete sampling.
- Note 3:** The monitoring only applies when the substance concerned is identified as relevant in the waste water inventory mentioned in BAT 3.
- Note 4:** BAT is to monitor emissions to water with at least the frequency given, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.
- Note 5:** All samples excluding those for pH and temperature must be collected on a 24-hour flow proportional composite sampling basis.
- Note 6:** Sampling must take place on alternate week days on a rolling basis to ensure representative samples are obtained for site operations which may vary across the working week.
- Note 7:** In the case of an indirect discharge to a receiving body, the monitoring frequency may be reduced if the downstream waste water treatment plant abates the pollutants concerned.

This technical amendment must be cited as Amendment C, to the licence.

Sealed by the Seal of the Agency on this the 31st day of October, 2024

PRESENT when the seal of the Agency was affixed hereto:



Kathleen Byrne, Authorised Person

