

Notice: Grant of Permit

This permit has been granted by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under Regulation 13 of the Pollution Prevention and Control (Scotland) Regulations 2012.

Permit number:	PPC/A/1193001
Operator:	<p>Celtic Renewables Grangemouth Plc</p> <p>SC582830</p> <p>Suite 2, Ground Floor Orchard Brae House, 30 Queensferry Road, Edinburgh, EH4 2HS</p>
Date of issue:	<<DD/MM/YYYY>>
Permitted activities:	<p>The operation of an installation where the following activities are carried out:</p> <p>Producing organic chemicals including— organic compounds containing oxygen, including alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, phenols, epoxy resins,</p> <p>and any directly associated activities, as further detailed in this permit.</p>
Site location:	<p>Celtic Renewables Grangemouth Plc Caledon Green Exemplar Plant Caledon Green, Earls Gate Park, Grangemouth FK3 8TR</p>

**Conditions applicable
to this permit:**

The conditions contained in the schedules of this permit. Terms used in this permit are, unless otherwise specified, defined in the Interpretation of Terms schedule.

DRAFT

CONTENTS

INTERPRETATION OF TERMS	3
--------------------------------------	----------

SCHEDULES

1 THE PERMITTED INSTALLATION.....	6
1.1 Description of Permitted Installation	6
1.2 Site Plan	8
1.3 Location Plan	9
2 GENERAL CONDITIONS	10
2.1 Administration	10
2.2 Records	10
2.3 Reporting	11
2.4 Incidents	11
2.5 Resource Utilisation	13
2.6 Waste Handling and Storage	13
2.7 Sampling and Monitoring Facilities	13
2.8 Commissioning	13
2.9 Weighbridge.....	15
3 CONDITIONS APPLYING TO THE PERMITTED INSTALLATION AS A WHOLE	19
3.1 Start Up.....	19
3.2 De-commissioning	19
3.3 Environmentally Critical Items.....	19
3.4 Infrastructure.....	21
3.5 Birds, Vermin & Insects	22
3.6 Noise and Vibration	22
3.7 Air Emission Conditions	22
3.8 Odour Conditions.....	23
3.9 Dust.....	24
3.10 Storage of Liquids.....	24
3.11 Impermeable Pavement and Drainage	26
3.12 Leakages/Spills	26
3.13 Water Environment and Sewer Discharge Conditions	26
3.14 Protection of Soil and Groundwater	28
4 CONDITIONS APPLYING TO THE PRODUCTION OF BIOFUEL AND SOLVENTS	35
4.1 Operation of Process.....	35

EXPLANATORY NOTES

INTERPRETATION OF TERMS

For the purposes of this Permit, and unless the context requires otherwise, the following definitions shall apply:

“the Application” means the application made by Celtic Renewables Grangemouth plc to operate a biorefinery at the Caledon Green Exemplar Plant, Grangemouth, received by SEPA on 13 July 2020 and given the reference number PPC/A/1193001.

“Authorised Person” means a person who is authorised in writing under Section 108 of the Environment Act 1995 to carry out duties on behalf of SEPA;

“commissioning” means the commencement in operation of the Permitted Installation or part thereof, for the first-time following construction, or after any significant modification or change. It includes: the planning and management of the commissioning of the Permitted Installation or part thereof; functional testing of equipment; introducing process materials to the plant; resolution of technical and procedural problems; confirmation that all aspects of the plant operate as designed or planned; and confirmation the plant operates within the conditions of the Permit.

“emission” has the same meaning as in the Regulations;

“incident” means any of the following situations:

- Where an accident occurs which has caused or may have the potential to cause pollution;
- Where any malfunction, breakdown or failure of plant or techniques is detected which has caused or may have the potential to cause pollution;
- A breach of any condition of this Permit;
- Where any substance, vibration, heat or noise specified in any Condition of this Permit is detected in an emission from a source not authorised by a Condition of this Permit and in a quantity which may cause pollution;
- Where an emission of any pollutant not authorised to be released under any Condition of this Permit is detected;
- Where an emission of any substance, vibration, heat or noise is detected that has exceeded, or is likely to exceed, or has caused, or is likely to cause to be exceeded any limit on emissions specified in a Condition of this Permit.

“Location Plan” means the plan attached to Schedule 1 of this Permit;

“operation” has the same meaning as in The Pollution Prevention and Control (Scotland) Regulations 2012, A Practical Guide (Part A Activities), Issue 2

“the Permitted Activities” are defined in Schedule 1 of this Permit;

“the Permitted Installation” is defined in Schedule 1 of this Permit and includes references to parts of the Permitted Installation;

“pollutant” and “pollution” have the same meaning as in the Regulations;

“SEPA” means the Scottish Environment Protection Agency;

“SEPA’s Odour Guidance 2010” means that guidance published by SEPA, or any revision of that Guidance as subsequently published, on SEPA’s website at www.sepa.org.uk.

“the Site Boundary” is defined in Schedule 1 of this Permit;

“Site Plan” means the plan attached at Schedule 1;

“Strong Stream” means any process effluent or contaminated sump or bund water not suitable for direct discharge to the private wastewater treatment plant

“the Regulations” means The Pollution Prevention and Control (Scotland) Regulations 2012;

“waste” has the same meaning as in the Regulations;

“water environment” has the same meaning as in the Water Environment and Water Services (Scotland) Act 2003 that is all surface water, groundwater and wetlands; and “surface water”, “groundwater” and “wetlands” shall have the same meanings as in the Act.

“Weak Stream” means any discharge from the attenuation pond direct to the private wastewater treatment plant

Any reference to a numbered Condition, group of Conditions, Schedule, Table, Appendix, Figure or Paragraph is a reference to the condition, group of conditions, schedule, table, appendix, figure or paragraph bearing that number in this licence;

Except where specified otherwise in this Permit:

- “day” means any period of 24 consecutive hours,
- “week” means any period of 7 consecutive days,
- “month” means a calendar month,
- “quarter” means a calendar quarter
- “year” means any period of 12 consecutive months;

and any derived words (e.g. “monthly”, “quarterly”) shall be interpreted accordingly;

Except where specified otherwise in this Permit, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of this Permit) and to any other enactment, which may, after the date of this Permit, directly or indirectly replace it, with or without amendment.

1 THE PERMITTED INSTALLATION

1.1 Description of Permitted Installation

1.1.1 The permitted installation to which this Permit applies ("the Permitted Installation") is:

1.1.1.1 The stationary technical unit specified in paragraph 1.1.4 (the Stationary Technical Unit), where the activities specified in paragraph 1.1.3 are carried out ("the Activities"), together with the directly associated activities specified in paragraph 1.1.5 ("the Directly Associated Activities").

1.1.1.2 The site of the Permitted Installation is delineated in red on the Site Plan ("the Site Boundary").

1.1.2 The general location of the Permitted Installation is as shown on the Location Plan.

1.1.3 The Activities carried out at the Stationary Technical Unit are:

1.1.3.1 The production of sustainable bio-chemicals and associated co-products from industrial residues and other low value materials; being an activity described in Part A of Section 4.1 (b) of Schedule 1 to the Regulation;

1.1.4 The Stationary Technical Unit comprises the following units:

1.1.4.1 Road Tanker loading/unloading area including valves, barrier and bunding, fitted with an automatic control system

1.1.4.2 Conveyors

1.1.4.3 58 Storage vessels comprising:- Tanks, Hoppers and other vessels; together with their associated pipework and infrastructure as detailed in the Table below

[The Table has been removed from this version of the permit due to Commercial Confidentiality]

1.1.4.4 vegetable cleaning equipment and macerator

1.1.4.5 mixers and agitators

1.1.4.6 Fermentation system comprising 17 fermenters as follows

[These Details have been removed from this version of the permit due to Commercial Confidentiality]

1.1.4.7 Distillation column and associated abatement

1.1.4.8 Two stage odour abatement system comprising a 2-stage wet scrubber and carbon Filtration system

1.1.4.9 A 16.9m High Stack

1.1.4.10 Centrifugation equipment comprising centrifuge and associated pipework and centrate collection system ...

1.1.4.11 Steam handling, including pressure reduction and injection equipment

1.1.4.12 Process Cooling equipment including fans, heat exchangers, compressors and pumps

1.1.5 The following Directly Associated Activities are carried out on the Site:

maintenance and calibration of the weighbridge or other weight measuring system

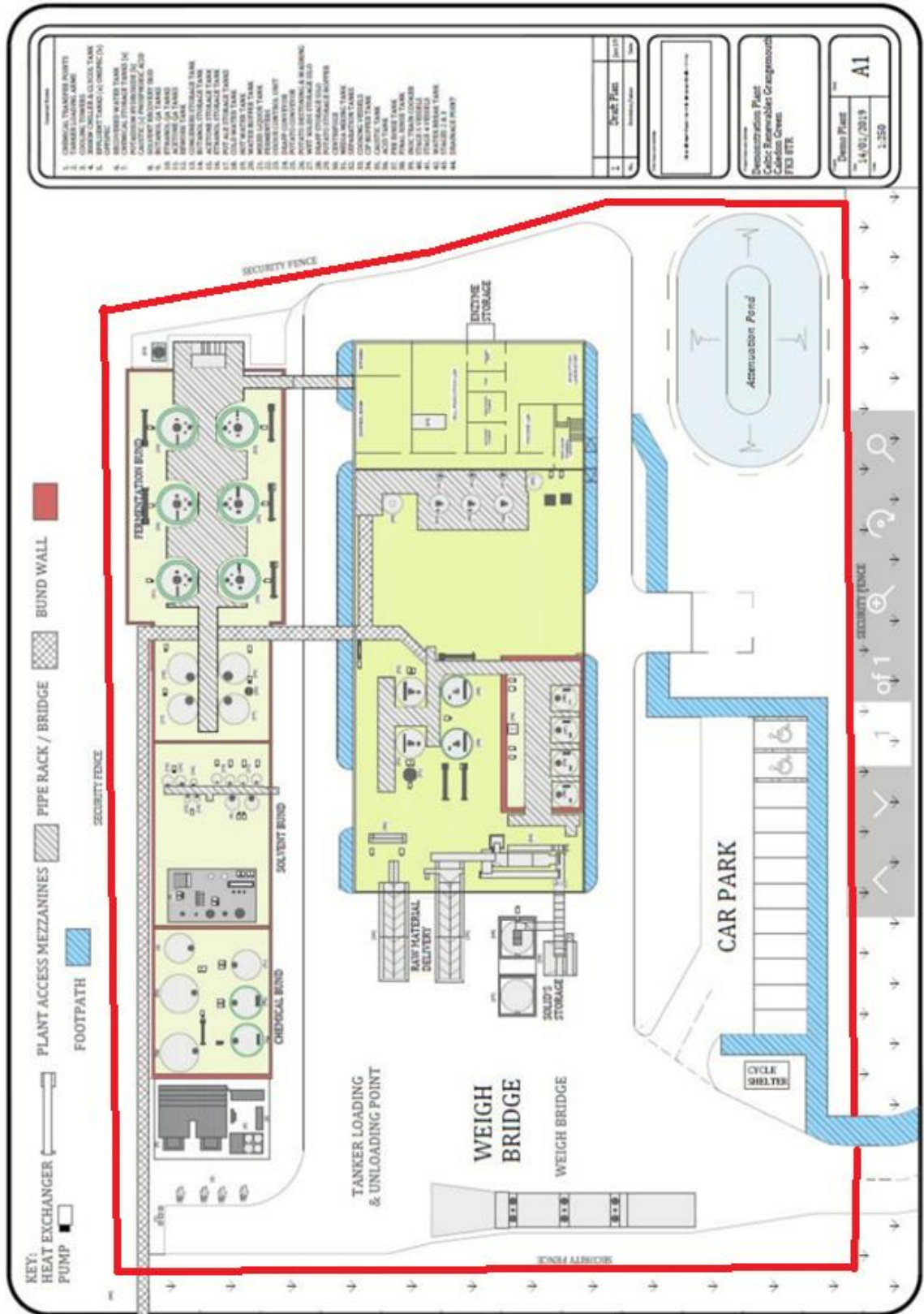
product quality check and inspection facilities

coolant top up

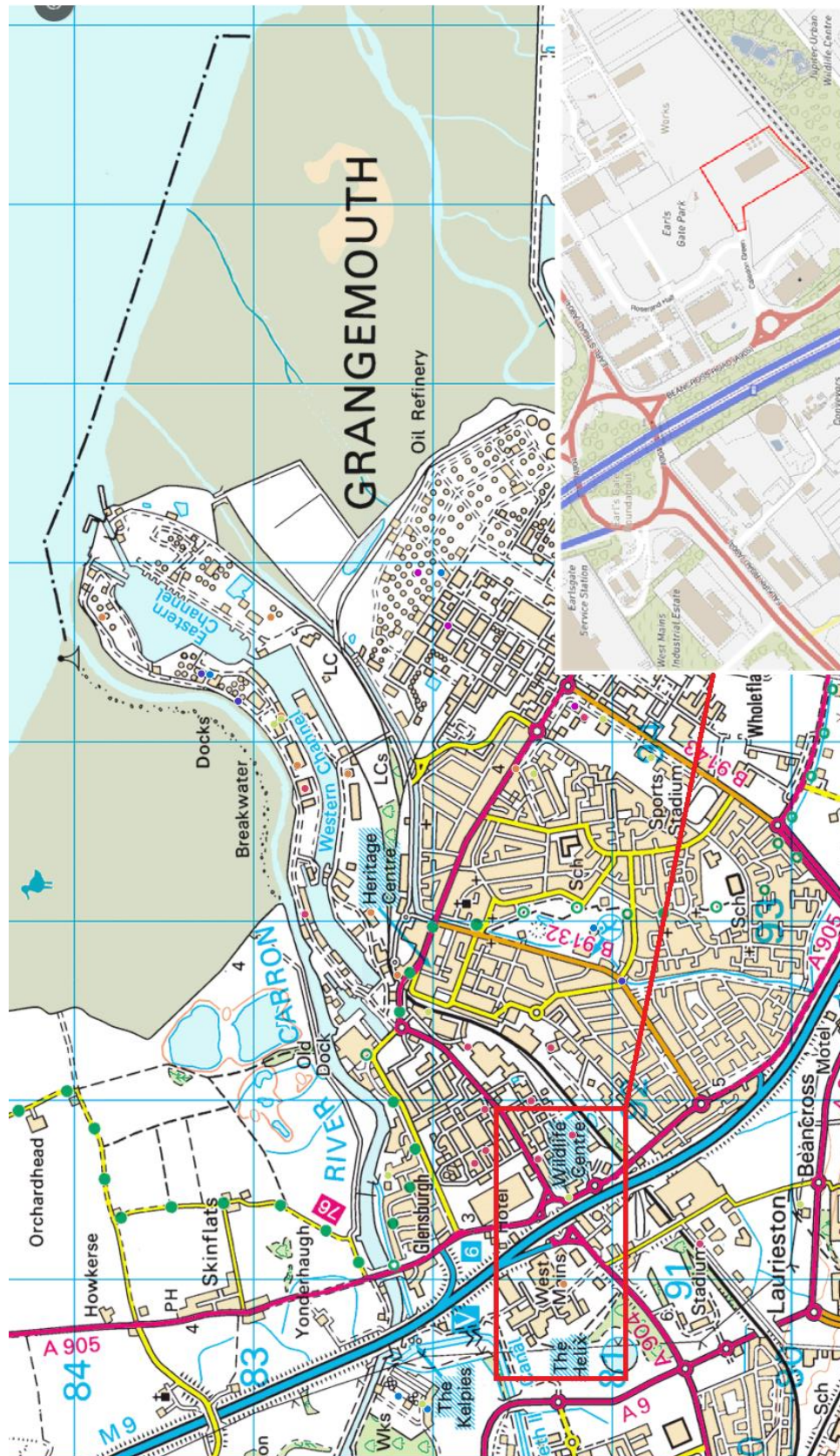
1.1.6 For the purposes of this Permit, the Activities and Directly Associated Activities shall be known together as “the Permitted Activities”.

DRAFT

1.2 Site Plan



1.3 Location Plan



2 GENERAL CONDITIONS

2.1 Administration

- 2.1.1 The Operator must ensure that the operation of the Permitted Installation is in accordance with and to the extent permitted by this Permit.
- 2.1.2 The Operator shall have an appropriate person (and deputy) as the primary point of contact with SEPA and shall notify SEPA in writing of the name of the appointed person (and deputy) within 4 weeks of the date of this Permit.
- 2.1.3 In the event of a different person being appointed to act as primary point of contact (or deputy) the Operator shall notify SEPA in writing of the name of the appointed person or deputy without delay.
- 2.1.4 The Permitted Installation shall be managed and operated, by using sufficient competent persons and sufficient resources, in accordance with a written management system that:
- a) ensures that the installation is operated in compliance with this Permit
 - b) identifies and minimises risks of pollution;
 - c) ensures that all appropriate preventative measures are taken against pollution; and
 - d) ensures that no pollution is caused.
- 2.1.5 The written management system required by Condition 2.1.4 shall be implemented within 6 months from the date this Permit is granted and shall be reviewed at least once every 4 years.
- 2.1.6 All reviews required by Condition 2.1.5 shall be recorded and the results of any review incorporated in the written management systems and implemented within a period of 3 months from the end of the review.
- 2.1.7 A copy of this Permit shall be kept at the Permitted Installation and shall be made readily accessible for examination by all staff
- 2.1.8 Any systems or procedures used by the Operator to demonstrate compliance with a Condition of this Permit shall be recorded.

2.2 Records

- 2.2.1 All records made in compliance with this Permit shall be kept in a systematic manner.
- 2.2.2 Unless otherwise specified in a Condition of this Permit, every record made in compliance with a Condition of this Permit shall be preserved for not less than 5 years from the date of its being made. Every such record shall be kept at the Permitted Installation for not less than one year from the date of its being made and thereafter preserved at a location, previously notified to SEPA in writing, if that location is not the Permitted Installation.
- 2.2.3 All records shall be legible, and any amendment made to any record made in compliance with a Condition of this Permit shall be made in such a way as to

leave the original entry clear and legible. The reason for each amendment shall be explained in the said record.

- 2.2.4 Without prejudice to Condition 2.2.2, all operator's records relevant to the operation or maintenance of the Permitted Installation shall be kept at the Permitted Installation for not less than one year from the end of the period to which they apply.

2.3 Reporting

- 2.3.1 Where any Condition of this Permit requires information to be reported, a report shall be forwarded to SEPA by the date(s) or within the period or at the frequency specified in Table 2.1, and, where appropriate, the first report shall be due on the date specified in that Table. All such reports shall include the Permit number, Permit Condition number and the name of the Operator.
- 2.3.2 The reports referred to in Condition 2.3.1 shall be forwarded to SEPA to the address specified by SEPA in the explanatory notes attached to this Permit.
- 2.3.3 Where the Permitted Installation has not operated for the duration of any relevant reporting period specified in Table 2.1, the Operator shall provide written notification to SEPA. This shall confirm that no relevant reports have been made in terms of Condition 2.3.1, because the Permitted Installation has not operated during the said period. Such notifications shall be submitted within one month of the end of the reporting period concerned.
- 2.3.4 All notifications required by any Condition of this Permit shall be made to SEPA in the manner specified in that Condition to the address specified in the explanatory notes attached to this Permit by the date(s) or within the period or at the frequency specified in Table 2.1 and, where appropriate, the first notification shall be due on the date specified in that Table. All such notifications shall include the Permit number, Permit Condition number and name of the Operator.

2.4 Incidents

- 2.4.1 In the event of an incident all necessary measures shall 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 incident.
- 2.4.2 Without prejudice to the requirements of condition 2.4.1, in the event of a breach of any condition of this permit the operator shall immediately take the measures necessary to ensure that compliance is restored in the shortest possible time.
- 2.4.3 Notwithstanding the requirements of Condition 2.4.1 and 2.4.2 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 shall immediately suspend operation of the Permitted Installation

or relevant part thereof until such time as it can be operated in compliance with this Permit.

- 2.4.4 In the event of an incident, the Operator shall notify SEPA by telephone without delay to 0800 80 70 60. This notification shall include as far as practicable the information specified in Condition 2.4.5.
- 2.4.5 The Operator shall confirm any incident to SEPA in writing by the next working day after identification of the incident. This confirmation shall include: the time and duration of the incident, the receiving environmental medium or media where there has been any emission as a result of the incident, an initial estimate of the quantity and composition of any emission, the measures taken to prevent or minimise any emission or further emission and a preliminary assessment of the cause of the incident.
- 2.4.6 Any incident notified to SEPA shall be investigated by the Operator, and a report of the investigation sent to SEPA. The report shall detail, as a minimum, the circumstances of the incident, an assessment of any harm to the environment and the steps taken by the Operator to bring the incident to an end. The report shall also set out proposals for remediation, where necessary, and for preventing a repetition of the incident.
- 2.4.7 Prior to operating the process, the Operator shall prepare, implement, and maintain an "Incident Prevention and Mitigation Plan". The plan shall include a detailed description of the contingency arrangements and actions that would be invoked in the event of any maintenance, breakdown or failure of the Odour Abatement System described in 1.1.4.8 either because of a deterioration in the performance of the plant, or the need to perform an inspection of, or a repair to, any part of the Odour Abatement System. A copy of the Plan shall be reported to SEPA
- 2.4.8 At least every 5 years, the Operator shall review the Incident Prevention and Mitigation Plan required under Condition 2.4.7. 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.

2.5 Resource Utilisation

- 2.5.1 At least every 4 years, the Operator shall carry out a systematic assessment to determine:
- 2.5.1.1 how and where raw materials (including water and fuel) and energy are used within the Permitted Installation;
 - 2.5.1.2 the quantities of raw materials (including water and fuel) and energy used within the Permitted Installation;
 - 2.5.1.3 how and where material losses and wastes are generated within the Permitted Installation;
 - 2.5.1.4 the quantities of material losses and wastes are generated within the Permitted Installation;
 - 2.5.1.5 how and where raw materials (including water) and energy can be utilised more efficiently within the Permitted Installation to reduce resource use and minimise material losses and waste;
 - 2.5.1.6 which of the resource efficiency measures identified in 2.5.1.5 will be implemented at the Permitted Installation during the 4 year assessment cycle.
- 2.5.2 The assessment required by condition 2.5.1 shall be recorded using the SEPA “systematic assessment of resource use and efficiency template” (IEDT-04), or an equivalent format as agreed by SEPA, and reported to SEPA as specified in Table 2.2.
- 2.5.3 The operator shall implement the resource efficiency measures identified in the systematic assessment within the timescales specified in the systematic assessment.
- 2.5.4 The information required in 2.5.1.2 and 2.5.1.4 shall be recorded annually.
- 2.5.5 For the purposes of condition 2.5.1 “raw materials, “energy” and “fuel” shall, as a minimum, include the materials listed in Table 2.3.

2.6 Waste Handling and Storage

- 2.6.1 The Operator shall maintain a record of the location, estimated quantities and types of all wastes generated by the Permitted Activities and stored within the Permitted Installation.

2.7 Sampling and Monitoring Facilities

- 2.7.1 Sampling measurement and monitoring facilities at the Permitted Installation shall conform to the requirements of the relevant test methods specified in any Condition of the Permit or as otherwise agreed in writing by SEPA.
- 2.7.2 Unrestricted access to all sampling points required by any Condition of this Permit shall be provided at all times.

2.8 Commissioning

- 2.8.1 Until Conditions 2.8.2 to 2.8.3.3 inclusive have been complied with the Operator shall not carry out any new activities or substantially changed activities, except

as part of the commissioning activities notified to SEPA in compliance with Conditions 2.8.3 ("the Commissioning Activities").

- 2.8.2 During the Commissioning Activities, the design features necessary to ensure compliance with any condition of this permit shall be tested and demonstrated to be effective. This shall include, but not be restricted to, pressure relief valves, control systems and alarms including automatic valve and barrier operation, odour abatement system described in 1.1.4.8, the efflux velocity of the stack and leak testing of bunds, sumps and drainage system
- 2.8.3 At least 14 days, or such period as otherwise agreed in writing with SEPA prior to carrying out any Commissioning Activities the Operator shall notify SEPA in writing of details of the Commissioning Activities to be carried out, including:
 - 2.8.3.1 An assessment of any environmental impact which commissioning activities may have;
 - 2.8.3.2 The proposed dates on which the said work will be started and completed; and
 - 2.8.3.3 The criteria for determining when the Commissioning Activities have ceased.
- 2.8.4 When carrying out the Commissioning Activities the Operator shall carry out tests to demonstrate that the Permitted Installation can be operated so as to comply with any condition of this Permit.
- 2.8.5 Should any test required by Condition 2.8.2 indicate that the conditions of this Permit have not or cannot be complied with the Operator shall cease carrying on that part of the Commissioning Activities until remedial actions to ensure compliance with the conditions of this Permit have been implemented. This

shall be treated as an incident as per conditions 2.4.1, 2.4.2, 2.4.3, 2.4.4 and 2.4.5.

2.8.6 For the avoidance of doubt where the circumstances set out in Condition 2.8.5 have occurred, the Operator shall carry out further tests in compliance with Condition 2.8.4.

2.8.7 Within one month of ceasing the Commissioning Activities the Operator shall prepare and submit to SEPA a written report including the following:

2.8.7.1 Details of tests carried out under Condition 2.8.2;

2.8.7.2 Details of and explanations for any faults in the plant, equipment or operating procedures identified during said tests that resulted, or may have resulted in the breach of any Condition of this Permit.

2.8.7.3 Details of any remedial action taken or to be taken to overcome any of the said faults;

2.8.7.4 Where remedial action is to be taken the date by when each action will be taken, justification of this date and why the Operator believes Commissioning Activities have ceased, despite remedial action still being required; and

2.8.7.5 Details of deviations from the original operating methodology of the Permitted Activity and justification for such deviations.

2.9 Weighbridge

2.9.1 A weighbridge shall be provided at the permitted installation.

Table 2.1 - Reporting, Notification, Review and Assessment Requirements

Summary of Information to be Reported, Notified, Reviewed or Assessed	Condition	Date/Within period/ Frequency to be Reported	Date First Due
Notification of primary and deputy site contact	2.1.2	Within 4 weeks of date of the permit	
Change to primary and / or deputy site contact	2.1.3	without delay	
Non-Operation of the permitted installation during reporting period	2.3.3	Within 1 month of the end of the reporting period	
Incident Initial Notification	2.4.4	Without delay	
Written confirmation of incident	2.4.5	Next working day after incident	
Incident Investigation report	2.4.6	On completion of investigation into incident	
Copy of Incident Prevention and Mitigation Plan	2.4.7	Prior to completion of the commissioning of the plant	

Review of Incident Mitigation Plan	2.4.8	At least every 5 years	01 March 2027
Resource Utilisation assessment and report	2.5.1 & 2.5.2	At least once every 4 years	By 01 March 2026
Written notification of commencement of Commissioning Activities	2.8.3	At least 14 days prior to commencement of Commissioning or as agreed in writing with SEPA	
Copy of the Commissioning Report	2.8.7	Within one month of ceasing the Commissioning Activities	
Copy of the Start Up Plan	3.1.1	Prior to operating the process	
Review of the Start Up Plan	3.1.2	At least every 4 years	By 01 March 2026
Copy of the De-Commissioning Plan	3.2.1	Within 6 months of the date of the permit	
Notification of intention to cease permitted activities for period exceeding 12 months	3.2.2	No later than 2 months prior to proposed cessation date	
Review of Decommissioning Plan	3.2.4	At least every 4 years or on a substantial change in operation	By 01 March 2026
Review of maintenance of Environmentally Critical equipment	3.3.6	Annually	01 March 2023
Copy of the Noise and Vibration Management Plan	3.6.1	Prior to process operating	
Noise and vibration review	3.6.2	At least every 2 years	By 01 March 2024
Mass emissions to air results	3.7.6	Annually	
Assess, produce and maintain an inventory of waste gas streams	3.7.8	Within 18 Months	01 September 2023
Copy of the Odour Management Plan	3.8.3	Prior to operating process	
Systematic assessment and review of odour emissions	3.8.4	Annually	01 March 2023
Proposed changes to Odour Management Plan	3.8.6	At least 14 days prior to change being made	
Operation, maintenance and calibration records of abatement and monitoring equipment	3.8.11	If requested by SEPA	

Assessment of containment structures and drainage systems	3.10.5	At least every 5 years	By 01 March 2027
Mass emissions report for effluent discharges	3.13.12	Annually	
Systematic assessment of all measures to prevent emissions to soil and groundwater.	3.14.4	At least every 4 years	By 01 March 2026
Assessment of floors, yard surfaces and bunds	3.14.5	At least once per year	By 01 March 2023
Assessment and report the Relevant Hazardous Substances monitoring in soils and groundwater	3.14.7	At the frequency specified in Table 3.2 in this permit	By 01 March 2027
Detailed groundwater and soil monitoring plan	3.14.9	At least 6 months before carrying out the monitoring	
Revised soil and groundwater monitoring plan	3.14.11	Where changes are proposed, not later than 6 months after each monitoring event	

Table 2.2 - Resource Utilisation Data Recording

Data required to be recorded by Condition 2.5.2	Recording Frequency
Raw material use, in tonnes	Yearly
Waste produced for each waste stream in tonnes	Yearly
Energy use by source in equivalent CO ₂ emissions	Yearly
Energy use by tonne of product category in equivalent CO ₂ emissions	Yearly

Table 2.3 - Raw Materials, Energy and Fuel

Water
Electricity
Steam
Acids (reported by type)
Alkali (reported by type)
Anti-foam
Vegetable Matter (reported by type)

3 CONDITIONS APPLYING TO THE PERMITTED INSTALLATION AS A WHOLE

3.1 Start Up

- 3.1.1 Prior to operating the process, the Operator shall implement and maintain the “the Start Up Plan” setting out the necessary steps to be taken by the Operator prior to start-up of operations of the Permitted Installation to ensure that all appropriate preventative measures are taken against pollution and that no significant pollution is caused. A copy of the Start-up plan shall be submitted to SEPA
- 3.1.2 At least every 4 years, the Operator shall review the Start Up Plan required under condition 3.1.1. Each review of the said Start Up Plan shall be recorded and where the Operator makes any revisions to the said plan, said revisions shall be recorded.

3.2 De-commissioning

- 3.2.1 Within six months from the date of the permit the operator shall prepare and maintain a plan (“the de-commissioning plan”) for the decommissioning of the permitted installation. The de-commissioning plan shall set out the steps to be taken by the operator after final cessation of the permitted activities. A copy of the de-commissioning plan shall be submitted to SEPA
- 3.2.2 The Operator shall notify SEPA in writing of its intention to cease the Permitted Activities, or any part thereof, for any period exceeding 12 months, no later than 2 months prior to the proposed date of cessation.
- 3.2.3 The Operator shall implement the de-commissioning Plan on final cessation of the Permitted Activities or any part thereof.
- 3.2.4 The Operator shall review, record and, where necessary, update the de-commissioning Plan as follows:
 - 3.2.4.1 at least every 4 years; and
 - 3.2.4.2 where the Operator plans to make a substantial change in the extent or nature of the Permitted Installation.

3.3 Environmentally Critical Items

- 3.3.1 Prior to operating the process, the Operator shall identify and designate as environmentally critical any item or process, plant, or instrumentation that it relies on for the prevention or limitation of pollution from the Permitted Installation (an “Environmentally Critical item”).
- 3.3.2 Without prejudice to condition 3.3.1, the Operator shall designate as an Environmentally Critical Item each of those items specified in Table 3.1.
- 3.3.3 The Operator shall maintain a register of all Environmentally Critical Items designated by it in accordance with Condition 3.3.1 and 3.3.2. The said register

shall contain the following records in respect of each Environmentally Critical Item:

- 3.3.3.1 a description of the said Environmentally Critical Item and its mode of operation;
 - 3.3.3.2 the performance standards expected of the said Environmentally Critical Item;
 - 3.3.3.3 the acceptable range, with justification, for each direct or indirect operating parameter that might materially affect the achievement of the performance standard referred to;
 - 3.3.3.4 details of all monitoring necessary to assess compliance with the performance standard and operating parameters referred to, including details regarding the handling and storage of such data;
 - 3.3.3.5 a description of the actions that should be taken in the events of any performance standard or acceptable operating parameter not being met, or the Environmentally Critical Item not being operational, monitoring failing or malfunctioning and if this is dependent upon any factor (such as the nature of the Permitted Activities undertaken);
 - 3.3.3.6 a description of all maintenance and/or calibration work that is necessary to secure the performance standard referred to; and
 - 3.3.3.7 a description of critical spare parts that will be held at the Permitted Installation for the said Environmentally Critical Item, the minimum required stock level for each such spare part and the current stock level for each spare part
- 3.3.4 Notwithstanding the requirements of condition 3.3.3 The Operator shall maintain a register of any pressure relief or reduction valves describing the: - location (site plan), height, the items of plant it serves, note any abatement apparatus incorporated into the system and describe any monitoring or alarm system and its purpose. Each pressure relief and reduction valve shall be clearly marked with a reference corresponding to its entry in the register.
- 3.3.5 The Operator shall record the following in respect of each Environmentally Critical Item:
- 3.3.5.1 compliance assessment referred to in condition 3.3.3.4.
 - 3.3.5.2 the time and date of each occasion on which the performance standard and/or acceptable operating parameter was not met, and the actions taken in response;
 - 3.3.5.3 for each record made as a requirement of condition 3.3.3.4 the reason why the performance standards and/or an acceptable operating parameter were not met;
 - 3.3.5.4 all maintenance and /or calibration work carried out on the said Environmentally Critical Item; and
 - 3.3.5.5 each occasion on which the stock level for any critical spare part drops below the specified level.
- 3.3.6 The Operator shall undertake and record an annual review of the maintenance records to identify equipment that has failed frequently and/or common failure

modes. Subsequent to the review an improvement programme shall be developed, recorded, and implemented to minimise recurrences of the identified failures and failure modes.

Table 3.1 Environmentally Critical Item

ITEM
All odour abatement equipment and associated systems including the Stack
All environmentally critical mixers associated with the blending of fermenter feedstock
Fermenters and associated infrastructure valves and pipework
Distillation equipment including stills, valves, pipework, and abatement system
Fermenter feed systems including hoppers, conveyors, and associated infrastructure
All environmentally critical ductwork for the transfer of off-gas
All fans associated with the odour abatement system.
All pressure relief valves and their mechanisms including both for steam delivery and product storage systems
All environmentally critical monitoring devices, including probes, sensors, etc. and associated recording systems
Cooling tower including fans and coolant systems
Weighbridge
Tanker reception facility including automatic barrier and automatic valve closing mechanism
Attenuation Pond including discharge valve, drains, pipes, and connections
All Mobile Bunds
Wet Cake processing including centrifuge, storage tanks and delivery systems

3.4 Infrastructure

- 3.4.1 All buildings, tanks and pipework forming part of the Permitted Installation shall be constructed and maintained to prevent the uncontrolled emission of odour and noise.
- 3.4.2 All roads and surfaces shall be constructed and maintained in a condition such that their use is not compromised by debris, ruts, potholes, or ponded surface water.
- 3.4.3 The site shall be maintained in a secure condition to prevent unauthorised access.
- 3.4.4 Legible signs of a durable material and finish shall be prominently displayed throughout the site to ensure that users of the installation are aware of: -
 - a) Tank Contents
 - b) Loading and unloading points and instructions
 - c) Control measures
 - d) Waste reception areas and containers
 - e) Traffic routing, access, and speed restrictions

3.5 Birds, Vermin & Insects

- 3.5.1 All operations on the Permitted Installation shall be carried out in such a way to minimise the nuisance and hazards arising from the Permitted Installation in respect of the presence of birds, vermin, and insects. The Permitted Installation shall be inspected, in accordance with a documented risk assessment. The risk assessment should be reviewed as appropriate by a person suitably qualified and experienced in pest control.”
- 3.5.2 The Permitted Installation shall be inspected at least once every 12 weeks by a person suitably qualified and experienced in pest control and a treatment programme shall be undertaken to deal with any identified infestation forthwith

3.6 Noise and Vibration

- 3.6.1 Prior to operating the process, the Operator shall implement and maintain the noise and vibration management plan (“the Noise and Vibration Management Plan”) as provided in the Application. A copy of the Plan shall be reported to SEPA.
- 3.6.2 At least every 2 years, the Operator shall carry out a systematic assessment and review of Noise and Vibration emissions associated with the Permitted Activities, the purpose of which shall be to identify methods of reducing Noise and Vibration emissions. Each assessment shall be recorded and reported to SEPA.
- 3.6.3 All necessary measures shall be taken to minimise pollution arising from the Permitted Installation in respect of noise and vibration, as far as reasonably practicable. These measures shall include, but not be restricted to, those described in the Noise and Vibration Management Plan

3.7 Air Emission Conditions

- 3.7.1 There shall be no emissions to air from the installation other than those specified in table 3.3 which shall only be permitted from the emissions locations specified in table 3.3 and identified on the Emissions Plan in Appendix 1
- 3.7.2 The emissions specified in condition 3.7.1 shall not exceed the limits specified in table 3.3
- 3.7.3 The Operator shall carry out spot sampling (SS) and continuous (C) monitoring of emissions of the parameters specified in Table 3.3, at the sampling location specified in Table 3.3 and subject to the requirements for monitoring specified in Table 3.4.
- 3.7.4 For any parameter specified in Table 3.3 other than oxygen, visible plume, smoke or odour, all results of monitoring carried out under Condition 3.7.3 shall be corrected to the reference condition. The results of all tests and data used to correct the monitoring results to the reference condition specified in this condition shall be recorded.
- 3.7.5 The Operator shall record the date, time, duration, and results of all monitoring carried out under Condition 3.7.3 and report said results. For each result, the report shall include the operational mode of the Permitted Installation at the time of monitoring, the name of the person carrying out the monitoring, any

deviations from the methods specified in Table 3.4 and the associated confidence interval.

- 3.7.6 The Operator shall record and report the mass emission results for the parameters of the combined emissions specified in Table 3.5 using the method agreed in writing with SEPA. This information shall be reported in a format agreed in writing with SEPA.
- 3.7.7 Information used to estimate mass emissions in compliance with Condition 3.7.6 shall be recorded for each estimate.
- 3.7.8 By 01 September 2023, the operator shall establish and maintain an inventory of waste gas streams being emitted from the Permitted Installation under normal operation
- 3.7.9 The inventory of waste gas streams required by condition 3.7.8 shall include information about the characteristics of the waste gas streams, such as:
 - a) average values and variability of flow and temperature;
 - b) average concentration and load values of relevant substances and their variability ;
 - c) flammability, lower and higher explosive limits, reactivity;
 - d) presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, nitrogen, water vapour, dust).

3.8 Odour Conditions

- 3.8.1 All emissions to air from the Permitted Installation shall be free from offensive odour, as perceived by an Authorised Person, outside the Site Boundary.
- 3.8.2 Odour-masking agents or counteractants shall not be used to meet the requirements of Condition 3.8.1.
- 3.8.3 Prior to operating the process, the Operator shall implement and maintain the odour management plan ("the Odour Management Plan") as described in Appendix 4 to SEPA's Odour Guidance 2010.

A copy of the Plan shall be reported to SEPA.

- 3.8.4 At least annually, the Operator shall carry out a systematic assessment and review of Odour Emissions associated with the Permitted Activities, the

purpose of which shall be to identify methods of reducing odour Emissions and their impact. Each assessment shall be recorded and reported to SEPA.

- 3.8.5 The Odour Management Plan shall be updated following each systematic assessment and review as required by condition 3.8.6, the purpose of which shall be to implement the findings of the assessment in a systematic manner.
- 3.8.6 The Operator shall notify SEPA in writing on any proposed changes to the Odour Management Plan at least 14 days prior to the change being made.
- 3.8.7 The Odour Management Plan and all actions taken in accordance with the Odour Management Plan shall be recorded.
- 3.8.8 Olfactory monitoring shall be carried out in accordance with the Odour Management Plan.
- 3.8.9 The Operator shall record the result of each olfactory assessment referred to in Condition 3.8.8. as Follows
 - 3.8.9.1 Where odour is detected, the record required under condition 3.8.8 shall include the date, time, location, duration and result of the assessment, as well as the name of the person making the assessment, the wind direction and strength and the general weather conditions at the time. The record shall further include the operational status of the Installation.
 - 3.8.9.2 Where no odour is detected, the record required under condition 3.8.8 shall include, as a minimum, the date, time, wind direction and general weather conditions. The record shall further include the operational status of the Installation.
- 3.8.10 In the event that the Operator receives a complaint of odour from a member of the public, or SEPA notifies the Operator of a complaint of odour it received from a member of the public, the Operator shall record the receipt of the complaint, report receipt of the complaint to SEPA where the complaint has been received directly by the Operator and establish and record whether the complaint was a result of an incident at the Permitted Installation.
- 3.8.11 Odour abatement and monitoring equipment shall be operated, maintained, and calibrated according to manufacturer's instructions, a copy of which will be made available to SEPA if requested

3.9 Dust

- 3.9.1 All emissions to atmosphere from the permitted installation shall be free from visible emissions of particulate matter and fallout of particulate matter beyond the Site Boundary.

3.10 Storage of Liquids

- 3.10.1 The Operator shall maintain a plan that identifies the configuration and specification of all drains and subsurface pipework and the position and purpose of all sub-surface sumps, interceptors and storage vessels that are

used or have been used within the Permitted Installation from the date of this Permit until the Permit is surrendered.

- 3.10.2 All containers used to store liquids shall be located in a bund. The minimum capacity of any bund shall be either 110% of the capacity of the largest container, or 25% of the total capacity of all the containers within the bund, which-ever is the greater. In the event of any containers being connected to one another, they shall be treated as one container.
- 3.10.3 The bunded area(s) and containers shall conform to the following standards:
- a) the walls and base of the bund shall be impermeable;
 - b) the base shall drain to a sump;
 - c) all taps, valves, pipes and every part of each container shall be located within the area served by the bund;
 - d) all vent pipes shall be directed downwards into the bund;
 - e) no part of the bund shall be within 10 metres of a watercourse; and
 - f) all containers with a design capacity above 1250 litres shall be continuously monitored for level of contents.
- 3.10.4 The accumulation of rainwater, spillages or leaks shall be managed to ensure that at least 95% of the capacity of the bund is free of liquid.
- 3.10.5 At least every 5 years, all wet processing floor areas, bunds, tanks, interceptors, sumps and drainage systems shall be systematically assessed for

effectiveness and integrity. Each assessment shall be recorded and reported to SEPA.

3.11 Impermeable Pavement and Drainage

- 3.11.1 All working surfaces shall be impermeable to water and laid to falls that direct surface run-off to a purpose designed drainage system.
- 3.11.2 Site drainage shall be provided and maintained to ensure that: -
 - a) contaminated surface water run-off does not enter watercourses; and
 - b) the site does not become subject to ponding or waterlogging.

3.12 Leakages/Spills

- 3.12.1 Any spillages of effluent, wash waters, centrate, fuel, chemicals, product sump and bund water or other liquids shall be cleaned up forthwith. A supply of a suitable absorbent material shall be kept on site to deal with any such spillages

3.13 Water Environment and Sewer Discharge Conditions

- 3.13.1 There shall be no emissions to the water environment from the Permitted Installation.
- 3.13.2 All process “strong stream” effluents, generated within the permitted installation shall be transferred to a suitably licenced treatment plant, for treatment and disposal.
- 3.13.3 The “weak stream” effluents, produced in the permitted installation, discharged from Emission Point E1 on the Emissions plan in Appendix 1 shall not exceed the discharge limits for weak stream effluents from Emission Point E1 as detailed in Table 3.6.
- 3.13.4 Where there is an exceedance of the weak stream effluent discharge limit under Condition 3.13.3, all bund discharges shall be tested in accordance with condition 3.13.8, prior to release until the source of the exceedance has been identified.
- 3.13.5 Prior to the discharge to the attenuation pond of surface water from any bunded areas, including road bunds and mobile bunds (“bund water”) or sumps (“sump water”), the operator shall carry out the following screening checks to demonstrate that the bund or sump water is uncontaminated:
 - 3.13.5.1 Notwithstanding Condition 3.10.5, that the tanks within the bund show no signs of deterioration or change to the tank or its surrounds, especially of leakage or

indications of over or under pressure or changes to the paint condition (if painted),

- 3.13.5.2 that the effluent system tanks are not leaking into the bund,
- 3.13.5.3 that there is no reason to suspect the bund or sump water has been contaminated due to any other leak or spill of effluent,
- 3.13.5.4 that pH is within the discharge limits identified in Table 3.6 for emission point E1, and
- 3.13.5.5 that a visual inspection of the bund and sump water shows it is clear of any contamination (visibly free of solids, oils, fats, or greases).
- 3.13.6 Where all the checks carried out under Condition 3.13.5 are met, the bund or sump water shall be considered “uncontaminated” and can be conveyed to the attenuation pond for discharge as a weak stream effluent provided that the weak stream effluent discharge limits under Condition 3.13.3 are met.
- 3.13.7 Where any one of the checks carried out under Condition 3.13.5 is not met, the operator may submit a sample of the bund or sump water for further chemical analysis under Condition 3.13.8 or can deem it “contaminated” under Condition 3.13.9.
- 3.13.8 Bund or sump water shall be sampled and tested in accordance with following conditions:
 - 3.13.8.1 Unless otherwise agreed with SEPA, the operator shall use the EMC values provided in Table 3.6 to determine whether surface water collecting in sumps and bunds is contaminated.
 - 3.13.8.2 If the results of the sampling and testing required under Condition 3.13.7, when compared against the EMC values, show the bund or sump water is below the event mean concentration (EMC) value, or is within the range, as appropriate, for the parameters specified in Table 3.6 it shall be deemed to be “uncontaminated” and the operator may convey it to the attenuation pond for discharge as a weak stream effluent
- 3.13.9 Bund or sump water which fails the screening tests under Condition 3.13.5 or following sample testing under Condition 3.13.8 exceeds the EMC or is outwith the range for the parameters in Table 3.6, shall be deemed to be “contaminated” and must be transferred to a suitably licensed treatment plant for treatment and disposal.
- 3.13.10 The Operator shall, taking into account any requirements of the disposal site, implement a measurement and/or sampling programme for the emissions in Table 3.6, subject to the requirements for monitoring specified in Table 3.7, or as otherwise agreed in writing by SEPA.
- 3.13.11 The date, time and results of all samples and measurements carried out in compliance with any conditions within this section shall be recorded by the Operator.
- 3.13.12 The Operator shall record and report the mass emission results for the parameters of the combined emissions specified in Table 4.6 using the

method agreed in writing with SEPA (as summarised in that Table). This information shall be reported annually in a format agreed in writing with SEPA.

- 3.13.13 Information used to estimate mass emissions to the water environment in compliance with Condition 3.13.11, shall be recorded for each estimate.

3.14 Protection of Soil and Groundwater

- 3.14.1 Unless specified elsewhere in this permit there shall be no emission of any pollutants to groundwater or soil from the permitted Installation.
- 3.14.2 The operator shall maintain a record of any incident that has, or might have, impacted on the condition of any soil or groundwater under the permitted installation, either as a result of that incident or as a result of an accumulation of incidents, together with a record of any further investigation or remediation work carried out.
- 3.14.3 Notwithstanding the requirements of Condition 2.2.2, the record required by condition 3.14.2 shall be preserved until this permit is surrendered.
- 3.14.4 At least every 4 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.
- 3.14.5 The Operator shall at least once per year carry out a systematic assessment and inspection of internal floors, external yard surfaces and bunding in order to ensure compliance with Condition 3.14.1.
- 3.14.6 Any remedial action or upgrade identified by the systematic assessment and inspection required by Conditions 3.14.4 and 3.14.5 shall be completed within 3 months of completion of the survey or within such a timescale as is agreed in writing with SEPA.
- 3.14.7 The operator shall monitor the groundwater and 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 groundwater and soil contamination associated with the activities specified in Table 3.2 by those relevant hazardous substances. Each assessment shall be recorded and reported to SEPA. The first assessment shall be completed by 01 March 2027
- 3.14.8 The assessment required by condition 3.14.7 shall include interpretation of the results with reference to previous monitoring undertaken (including the site and where applicable baseline reports for the locations detailed in Appendix 3) and operations at the permitted installation and details of corrective actions that are required to protect groundwater and soil and remedy any contamination that has occurred a result of permitted activities.
- 3.14.9 The operator shall submit a detailed groundwater and soil monitoring plan, for the monitoring required by conditions 3.14.7 to SEPA at least six months in advance of carrying out the monitoring, which shall include the locations at

which monitoring shall be carried out and the methodology which shall be used

- 3.14.10 The operator shall carry out the monitoring required by condition 3.14.7 in accordance with the groundwater and soil monitoring plan required by condition 3.14.9.
- 3.14.11 The operator shall review the plan required by Condition 3.14.9 no later than 6 months after each monitoring event. The purpose of the review shall be to determine whether any changes to monitoring locations, frequency or parameters are required and where changes are proposed, submit a revised plan to SEPA.
- 3.14.12 Notwithstanding the requirements of Condition 2.2 all plans, monitoring and assessments reports undertaken in accordance with Conditions 3.14.4, 3.14.7, and 3.14.9 shall be preserved until the permit is surrendered.
- 3.14.13 The operator shall maintain the groundwater monitoring wells detailed in the plan required in Condition 3.14.9 in a condition fit for purpose, unless otherwise agreed in writing with SEPA. Where a well's function is compromised it shall be repaired or replaced to allow sample collection in accordance with Condition 3.14.7

Table 3.2 – Groundwater and Soil Monitoring Requirements

Relevant Hazardous Substance	Activity to be monitored	Frequency	
		Groundwater	Soil
Acetone	All Permitted activities within the Site boundary (See Appendix 1)	5 Years	10 Years
Ethanol			
n-Butanol			
VOCs			
pH			
BOD			
COD			
Copper			
Zinc			
Lead			
Ammonia/Ammonium			
Phosphate			

Table 3.3 - Emissions to Air ELVs

Source of Emission	Emission point	A1 Odour Control System Stack	A2 Distillation Abatement	A3 Pressure relief valves	A4 Tanker loading bay	A5 Wet Cake processing area
	Emission source	All Process emissions	Distillation process	Tanks Steam valves etc	Tanker loading Unloading	Wet Cake handling and processing
	Stack height/ diameter (m)	16.9m	Not Applicable			
	Location	As identified on the Air and Effluent Emissions Point Plan and Table in Appendix 1				
	NGR	Centred on NS 9171 8113				
Monitoring Details	Type of Monitoring	SS / visual	SS	SS	SS	SS
	Sampling Location	Stack	Distillation area	As identified in Pressure Relief Valves (PRV) Register	Loading bay during delivery or despatch	Wet Cake processing area during processing and handling
	Odour	No Offensive Odour	No Odour at the process unit	No Offensive Odour		
Limits for Parameters from Emission Source	Total VOC (TVOC) as total C (mgm ⁻³)	20				
	Water Droplets	No Emissions				

Table 3.4 - Emissions to Air Monitoring Requirements

Parameter	Emission point	Spot Sampling (SS)		
		Standard	Frequency	Operational Mode
Odour	All processes	No offensive Odour at Site Boundary	As described in the Odour Management Plan	Process active
Water droplets	Stack	Visual inspection	Weekly for first 6 months of	Process active
Total Volatile Organic Carbon (TVOC)	Stack	BS EN 12619	Within 1 year then as agreed with SEPA	Process active Abated and Unabated

Table 3.5 - Mass Emissions to Air

Parameter	Combined Emissions	Method (Summary)	Mass Emissions Result to be recorded as
Total Volatile Organic Carbon (TVOC)	A1	Average of all measured results X effluent gas flow over period	Kg per calendar year

Table 3.6 - Effluent Emissions

	Emission point	Surface Water and run off "Weak Stream" E1	Process Effluent "Strong Stream" E2	Surface water accumulating in Bunds and Sumps (Bund and Sump Water) E3
	Emission source	Attenuation Pond Private Sewer Connection	Flushes and Cleaning in Place (CIP) effluent from the plant	All Bunds and Sumps at the Permitted Installation
	Destination	"Weak Stream" discharge to Private Treatment Plant	"Strong Stream" Tankered to discharge point or an appropriately licensed site	Following assessment under Section 3.13 of this permit
	Location	Point X on Site Drainage Plan (Appendix 2)	Tanker Loading Point Air & Effluent Emissions Plan (Appendix 1)	Various Air & Effluent Emissions Plan (Appendix 1)
	NGR	Centred on NS 9171 8113		
Monitoring Details	Type of Monitoring	Instantaneous		Instantaneous
	Sampling Location	Attenuation pond discharge X		Bund or Sump affected
Limits for Parameters from Emission Source	Basis of Limit	Effluent Plant agreement limits		Event Mean Concentration (EMC) mg/l
	Flow	5 litres/sec		
	Volume			To be recorded
	Biochemical Oxygen Demand			10
	Chemical Oxygen Demand	500mg/l		150
	Total Suspended Solids			50
	Ammoniacal Nitrogen			1
	Total Phosphate			1
	pH	3 - 11		5 - 9
	Fats Oils and Grease			The potential discharge shall not include significant traces of visible oil or grease
	Emissions	Compliance with Discharge Limits	Compliance with Any Disposal Site Requirements	Compliance with relevant Disposal Route Limits

Table 3.7 - Effluent Emissions Monitoring Requirements

Parameter	Emission Points	Test Method	Reporting Format	Sampling/ Measurement Facility	Frequency
Flow And Duration	E1	Measured or calculated Supporting Guidance (WAT-SG-54) Technical Guide to Flow Measurement	m3 per hr or day and duration of discharge	Attenuation pond Discharge point	Discharge sampling
Volume	E3	Measured or calculated Supporting Guidance (WAT-SG-54) Technical Guide to Flow Measurement	m3	Bund or Sump	sump or bund water testing
Biochemical Oxygen Demand	E3	Measurement Assurance and Certification Scotland (MACS) ISO/IEC 17025	pH	Bund or Sump	sump or bund water testing
Suspended Solids	E3			Bund or Sump	sump or bund water testing
COD	E1			Attenuation pond Discharge point	Discharge sampling
	E3	MACS ISO/IEC 17025	mg l ⁻¹	Bund or Sump	sump or bund water testing
Ammoniacal Nitrogen	E3	MACS ISO/IEC 17025	mg l ⁻¹	Bund or Sump	sump or bund water testing
Total Phosphate	E3	MACS ISO/IEC 17025	mg l ⁻¹	Bund or Sump	sump or bund water testing
pH	E1	MACS ISO/IEC 17025	pH Units	Attenuation pond Discharge point	Discharge sampling
	E3			Bund or Sump	sump or bund water testing

Table 3.8 - Mass Effluent Emissions

Parameter	Combined Emissions	Method (Summary)	Mass Emission Result recorded as
Suspended solids	Strong Stream effluent Contaminated Sump or bund water plus any over strength effluent	Flow or volume and average concentration for each individual emission recorded over the same period calculated as load in Kg over unit time and extrapolated to a year	Kg per calendar year
COD	Strong Stream effluent Contaminated Sump or bund water plus any over strength effluent	Flow or volume and average concentration for each individual emission recorded over the same period calculated as load in Kg over unit time and extrapolated to a year	Kg per calendar year

4 CONDITIONS APPLYING TO THE PRODUCTION OF BIOFUEL AND SOLVENTS

4.1 Operation of Process

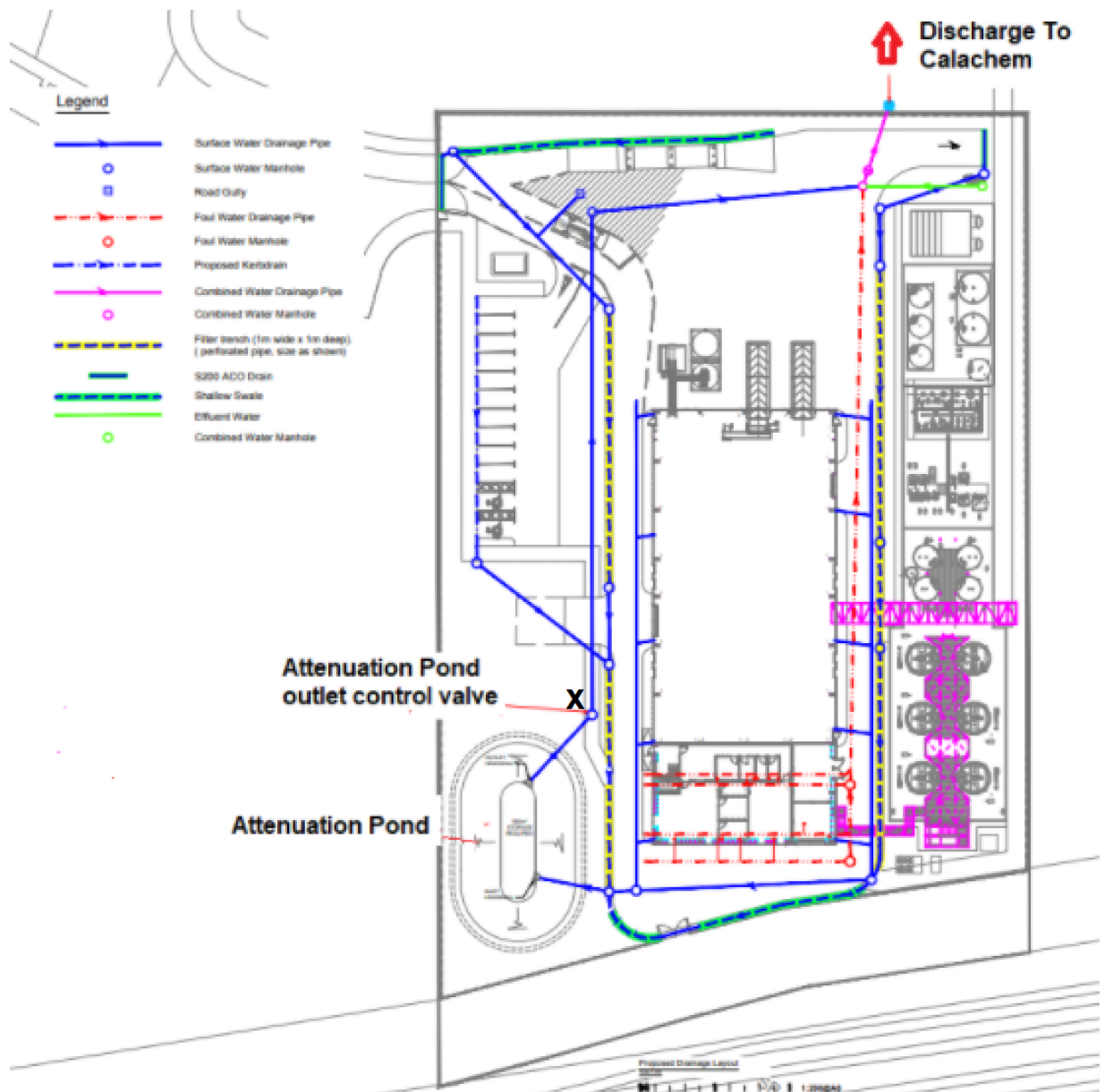
- 4.1.1 The loading and unloading of tankers shall only take place in the specified areas and shall be subject to correct operation of the automatic barriers and divert valve systems
- 4.1.2 During the loading and unloading of liquids or chemicals the operator shall ensure that all necessary checks are carried out on couplings hoses and pumps to ensure correct and secure attachment and that all site control procedures are followed.
- 4.1.3 The operator shall ensure that all process offgas is treated through the wet scrubber, and carbon filtration system, prior to being discharged through the stack
- 4.1.4 The operator shall ensure the water vapour content of the partially treated offgas from the wet scrubber does not impact on the performance or integrity of the Carbon filter

[illegible]

Appendix 1 Fig 2 Air and Effluent Emission Points Table

Ref. no.	Equipment		SOURCE OF RELEASE		CONDITIONS	ANY OTHER RELEVANT INFORMATION AND REMARKS
	EQUIPMENT NO. or GENERAL DESCRIPTION	EQUIPMENT DESCRIPTION	SOURCE OF RELEASE	LOCATION and FLOOR	OPERATING TEMPERATURE AND PRESSURE °C and barg	
FE 1	Tanker Area	Pot Ale and Chemical offloading, Solvent loading	pump seals, spillage from tanker hose	Outside, ground level	Ambient & Atmospheric	Area is fully bunded within a containment kerb so any fugitive emissions will be contained;
FE 2	Pot ale Intake and Storage	Pot ale offloading, heating, storage in 50m ³ tanks, transfer to media mixing.	pump seals, vent from pot ale tanks	Outside, ground level	Ambient & Atmospheric	Area is fully bunded within a containment kerb so any fugitive emissions will be contained;
FE 3	Draff and Potato intake and potato storage	Draff/potato lorry offloading, conveying,	pump seals, spillage from tanker transfer, conveyors	Outside, ground level	Ambient & Atmospheric	Conveyors have canopies and transfer line is air blown, preventing the build-up of residual material. Situated on concrete which will facilitate the clean up of accidental spills. All external drains lead to attenuation pond.
FE 4	Draff storage	Vent on 80m ³ silo. Positive displacement pump open hopper	pump hopper, vent from silo	Outside building, vent 14m up	Ambient & Atmospheric	Situated on concrete which will facilitate the clean up of accidental spills. All external drains lead to attenuation pond.
FE 5	Media mixing and routing	Mixing of draff and pot ale or potatoes and pot ale, maceration and transfer to cookers	pump seals, vent from mixing tank	Inside building. Vent from pot ale tank 8m above ground.	Ambient & Atmospheric (before mixing), 10barg during transfer	Situated within process building where process sumps can be emptied to effluent or attenuation pond. All drainage within the process building leads to the process sump.
FE 6	Cooking vessels	Sterilisation of raw materials.	Vent line on top of cookers (open before and after cooking complete).	Vent line routed to outside of building.	Ambient & Atmospheric	Situated within process building where process sumps can be emptied to effluent or attenuation pond. All drainage within the process building leads to the process sump.
FE 7	Fermentation Vessels and Mixed Liquor tank	100m ³ production scale fermentations. Also 125m ³ buffer vessel between fermentation area and solvent recovery area.	Vent line during CIP. pump seals	Top of fermenter, 14m above ground.	Ambient & Atmospheric	Vent line closed during fermentation or fermenter loading. During fermentation off-gas is routed to the odour abatement unit (see below). Only odour leaving fermenter will that during CIP. For MLT: Vent line will be closed during operation (which is continuous), only opened when MLT undergoes CIP. This is a not a regular process operation. Any residual gas from the media in the MLT will be routed to the odour abatement unit. All tanks are externally situated within concrete bund so any accidental spillages will be contained.
FE 8	Solvent Recovery Platform	Small vents on distillation system, these are not in regular operation rather.	Pump seals and vent lines, pump seals	Pumps = ground floor Vents = 18m & 22m	Ambient & Atmospheric (at vent tips)	Vents are intended for emergency venting only and are therefore as such not anticipated as being in regular usage. Externally situated within concrete bund so any accidental spillages will be contained
FE 9	Separations tanks	Open vent on roof of tanks, venting to inside of building.	Vents, pump seal	Vents = 12m above ground	Ambient & Atmospheric	Situated within process building where process sumps can be emptied to effluent or attenuation pond. All drainage within the process building leads to the process sump.
FE 10	Decanter	Open release of wet-solids from decanter to positive-displacement pump	Open to air	Ground level, inside building	Ambient & Atmospheric	Situated within process building where process sumps can be emptied to effluent or attenuation pond. All drainage within the process building leads to the process sump.
FE 11	Wet Cake Silo	Open vent on roof of silo 80.5m ³	pump hopper, vent from silo	Outside, 12m above ground level	Ambient & Atmospheric	Situated on concrete which will facilitate the clean up of accidental spills. All external drains lead to attenuation pond.
FE 12	Recovered water tank	Open vent on top of vessels	Vent, pump seals	Outside	Ambient & Atmospheric	Externally situated within concrete bund so any accidental spillages will be contained
FE 13	Effluent tanks	Open vent on top of vessels	Vent, pump seals	Outside	Ambient & Atmospheric	Externally situated within concrete bund so any accidental spillages will be contained
FE 14	Odour Abatement Unit	Vent downstream of odour abatement unit, at top of stack (not as yet designed)	Vent	Outside	Ambient & Atmospheric	All off-gases are vented through this stack. Odour abatement has taken place before the stack.
FE 15	Weighbridge	Raised weighbridge for weighing incoming materials	Accidental spillage	Outside	Ambient & Atmospheric	Situated on concrete which will facilitate the clean up of accidental spills. Spill kits situated in area.

Appendix 2 Site Drainage Plan



Appendix 3 Boreholes and Soil Trial Pits - Initial Site Report

EXPLANATORY NOTES

(These Explanatory Notes do not form part of the Permit)

1. BAT

It should be noted that Regulation 22 of the Regulations specifies that it is a condition of a Permit that the operator must use the best available techniques (BAT) for preventing or, where that is not practicable, reducing emissions from the installation. This is referred to as the 'general' BAT condition.

This does not apply to the extent that any other condition of the permit, or a standard rule which has effect as a standard rules condition, has the same effect.

Examples of aspects of the operation that have not been regulated by specific Conditions are general maintenance requirements.

BAT is defined in Regulation 4 of the Regulations as follows:

"best available techniques" mean the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole

"available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable Conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the UK, as long as they are reasonably accessible to the operator.

"best" means in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole.

"techniques" includes both the technology used and the way in which an installation is designed, built, maintained, operated and decommissioned.

"BAT conclusions" means a document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

"emerging technique" means a novel technique for an industrial activity that, if commercially developed, could, when compared to existing best available techniques provide a higher level of protection of the environment, or at least the same level of protection of the environment and higher cost savings.

"emission levels associated with best available techniques" means the range of emission levels obtained under normal operating conditions using a best available technique, or combination of best available techniques, as described

in BAT conclusions, expressed as an average over a given period of time, under specified reference conditions.

Schedule 3 of the Regulations specifies the matters to be taken into account in determining BAT.

In considering BAT, SEPA would expect the Operator to have regard to all relevant PPC sector or other technical guidance, including BAT Reference Documents and BAT Conclusions published by the European Commission and UK technical guidance published by the Environment Agency.

2 GENERAL STATUTORY REQUIREMENTS

The Permit does not detract from any other statutory requirements applicable to you in respect of the Permitted Installation, such as any need to obtain planning permission or building regulations approval or any responsibilities under legislation for health, safety and welfare in the workplace.

3. APPEALS

If you are aggrieved by any of the Conditions of the Permit, you should initially contact the local SEPA Office at the address or telephone number below. Further information on your right of appeal and the appeals procedure is contained Regulation 58 and Schedule 8 of the Regulations.

4. SUBSISTENCE CHARGES

An annual subsistence charge will be payable in respect of the Permit in terms of the Environmental Regulation (Scotland) Charging Scheme 2018, or any relevant charging scheme made under Section 41 of the Environment Act 1995, copies of which are available from SEPA.

5. ADDRESS AND TELEPHONE NUMBERS

The contact address and telephone number for all information to be reported in terms of the Permit, is as follows:

Scottish Environment Protection Agency
Angus Smith Building
6 Parklands Avenue
Eurocentral
Holytown
North Lanarkshire
ML1 4WQ

Tel: 01698 839000

Fax: 01698 738155

6. REVIEW OF CONDITIONS

The Conditions of the Permit will be periodically reviewed by SEPA.

7. PROPOSED CHANGE IN OPERATION OF INSTALLATION

It is a requirement of Regulation 45 of the Regulations that if you propose to make a change in the operation of the installation, you must notify SEPA at least 14 days before making the change. The requirement under Regulation 45 does not apply if you have already made an application to SEPA for the variation of the Conditions of the Permit containing a description of the proposed change.

N.B. the requirements of Regulation 45 are in addition to any obligations you may have under the Permit itself to only operate the Permitted Installation in the manner set out in the Permit and to notify SEPA of proposed changes to the Permitted Installation.

Regulation 46 and Schedule 7 of the Regulations provide details on applications for variation of the Permit in respect of proposed changes and substantial changes in operation.

“Change in operation” and “substantial change in operation” are defined in Regulation 2 of the Regulations.

8. ENFORCEMENT & OFFENCES

If SEPA is of the opinion that you have contravened or are contravening or are likely to contravene a Condition of the Permit, or an Incident or accident significantly affecting the environment has occurred as a result of the operation of the Installation it may serve an Enforcement Notice. Further details on Enforcement Notices are provided in Regulation 55 of the Regulations.

If SEPA is of the opinion that the operation of an installation poses an immediate danger to human health, threatens to create an immediate significant adverse effect upon the environment or involves a risk of serious pollution it must, in certain circumstances, serve a Suspension Notice on you. Further details on Suspension Notices are provided in Regulation 56 of the Regulations.

It is an offence to operate an installation covered by the Regulations without a Permit or in breach of the Conditions of the Permit. It is an offence to fail to comply with the requirements of an Enforcement or Suspension Notice. It is an offence to intentionally make a false entry in any record required to be kept under a Condition of a Permit. Further details on offences and on penalties liable to be imposed upon conviction of an offence are provided in Regulation 67 of the Regulations.

Directors, managers and other individuals within a company may be held personally liable for offences under the Regulations.

All personnel who are responsible for fulfilling any Condition of the Permit should be made aware of these facts.

9. BREACH OF A PERMIT CONDITION

Regulation 52 of the Regulations specifies that the Operator of an Installation must immediately give notice to SEPA of any breach of a condition of the permit. It is an offence to fail, without reasonable excuse to comply with Regulation 52.

Any statement made by an operator to SEPA for the purposes of complying with regulation 52 may only be used in a prosecution for an offence where in giving evidence the operator makes a statement inconsistent with the initial notification.

All personnel who are responsible for fulfilling any Condition of the Permit should be made aware of these facts.

10. RECORDED SYSTEMS, PROCEDURES OR INFORMATION RECORDING/ RETURN REQUIREMENTS

Where a Condition requires any system, procedure or information record/return, the Operator may demonstrate compliance by making use of any relevant existing written system used for any other purpose and which meets the requirements of the relevant Condition.

11. SYSTEMATIC ASSESSMENT (AND REVIEW)

Where a Condition of the permit requires a “systematic assessment (and review)” the assessment should be undertaken in a methodical and arranged manner. If you require guidance on the scope or extent of any assessment (and review) required to be undertaken, you should contact your local SEPA office at the address or telephone number given above.

12. COMMERCIAL CONFIDENTIALITY

Regulation 64 of the Regulations requires that SEPA maintain a register (“a Public Register”), whilst Schedule 9 of the Regulations sets out what the Public Register shall contain. Regulation 66(2) provides you with an opportunity to apply for exclusion from the Public Register for certain confidential information. Where you are required to supply SEPA with information whether via a condition in this permit, or otherwise, and that information falls under Schedule 9, if you wish it to be excluded from the public register as confidential information, then such a submission must include an application made under Regulation 66(2).