

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Archer Daniels Midland Erith Limited

Erith Oil Works
Church Manorway
Erith
Kent
DA8 1DL

Variation application number

EPR/QP3331PQ/V003

Permit number

EPR/QP3331PQ

Erith Oil Works

Permit number EPR/QP3331PQ

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

This notice incorporates changes which have been made on site since the original permit was issued as detailed below.

- inclusion of the receipt of raw rapeseed oil
- addition of the acceptance and treatment of wastewater from an adjacent site (different operator)
- inclusion of an additional surface water discharge point
- the removal of standby boilers and the use of kerosene as a fuel.
- upgrade of the high pressure steam boiler (2.2MWth)
- upgrade of the gas turbines (3 x 18MWth)
- inclusion of biofilters to replace chemical scrubbing
- the replacement of the existing thermal oxidiser and addition of a wet caustic scrubber for the mineral oil exhaust system.

The Erith Oil Works installation is situated at National Grid Reference (NGR) 550584, 179328. To the east the site is adjacent to the southern bank of the River Thames, the rest of the site is bordered by industrial properties. The nearest residential area is approximately 400m to the south/southwest.

The site has a capacity of 1.4M tonnes per year and processes rapeseed to produce rapemeal for feedstuffs (ca. 784,000 t/yr) and edible oils (616,000 t/yr). In addition, the installation also receives imported crude and refined vegetable oil for storage, prior to its transfer to an adjacent site for bottling, or being processed on site. The rapeseed is imported via road, ships and barges and delivered to storage silos. From storage the seed is pre-treated by sieving, then flaked in flaking rolls to rupture the oil cells. The flake is then preheated in the Rotating Tube Conditioner (RTC), then pressed in the screw presses; press caked is conveyed into the Solvent Extraction plant and the pressed oil is sent to the decanters and then into storage. The solvent extraction plant is designed to remove the remaining oil from the pressed cake and process the spent cake into animal feedstuffs. The extracted crude vegetable oil is sent to storage and further processing. The "crude" vegetable oil is degummed before entering the refining process to separate phosphates and gums. The refining process purifies the oil by removing free fatty acids and soaps. A major upgrade to the refining process in 2018 allowed for either chemical or physical refining, depending on the products being produced. The ability to switch process allows for optimisation chemical and energy use. The resulting reaction forms soaps, which are split from the oil. The oil then passes through a bleaching process prior to the deodorising process to improve the taste, odour, colour and stability of the oil by removing volatile substances. The oil is then stored for transportation or sold to a nearby bottling plant.

The combustion plant on site has a total thermal input capacity of 76MW. There are 5 five emission points relating to combustion plant. The remaining emission points relate to particulate matter. There are three 18MWth gas fired turbines on site which were upgraded in 2012 and a 2.2 MWth high pressure steam boiler, each has its own emission stack. This plant replaced aging plant which had been in use since permit issue. This plant is considered 'existing operational' as defined as existing Medium Combustion Plant and does not currently fall under the MCPD

until the relevant date for compliance under the Environmental Permitting (England and Wales) (Amendment) Regulations 2018.

Most of the process effluent is discharged via the onsite effluent treatment plant to sewer, this will include wastewater from the new thermal oxidiser (TO) and scrubber. The exception being waste waters discharged from the odour guard systems, boiler blow-down, and regeneration waters from the ion exchange resins which are discharged directly into the 24m³ final pit before discharge to sewer. The site also receives wastewater from the adjacent bottling plant for treatment and subsequent discharge. The site has a trade effluent consent which has been updated.

Uncontaminated surface water and cooling water from the site is discharged to controlled water via W1. Stormwater is discharged at W2, via Thames Water stormwater sewer to a pond.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application received	Duly made 18/04/2005	.
Request for information	26/07/2005	Response received 01/09/05
Request for information	20/09/2005	Response received 29/09/05
Request for information	13/12/2005	Response received 16/12/05
Agency variation determined EPR/QP3331PQ/V002	02/12/2013	Agency variation to implement the changes introduced by IED
Application EPR/QP3331PQ/V003 (variation and consolidation)	Duly made 21/06/2021	Application to update the permit to include changes that have taken place on site and inclusion of a new thermal oxidiser and scrubber for odour abatement.
Request for information	Received 16/06/2022	Additional detail to support odour management plan
Variation determined and consolidation issued EPR/QP3331PQ	16/12/2022	Varied and consolidated permit issued in modern format

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/QP3331PQ

Issued to

Archer Daniels Midland Erith Limited (“the operator”)

whose registered office is

Erith Oil Works
Church Manorway
Erith
Kent
DA8 1DL

company registration number 00159486

to operate a regulated facility at

Erith Oil Works
Church Manorway
Erith
Kent
DA8 1DL

to the extent set out in the schedules.

The notice shall take effect from 16/12/2022

Name	Date
Tracey Pollard	16/12/2022

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/QP3331PQ

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Archer Daniels Midland Erith Limited (“the operator”),

whose registered office is

**Erith Oil Works
Church Manorway
Erith
Kent
DA8 1DL**

company registration number 00159486

to operate an installation at

**Erith Oil Works
Church Manorway
Erith
Kent
DA8 1DL**

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Tracey Pollard	16/12/2022

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in red on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.3 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every year for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but

not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.3.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.3.3

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1; and
- (b) surface water and/or groundwater specified in tables S3.2 and S3.3;

- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3. unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the annual production/treatment data set out in schedule 4 table S4.2; and
 - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and

- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
AR1	Section 6.8 Part A(1)(d)(ii) Treating and processing material intended for the production of food products from vegetable raw materials at a plant with a finished product capacity of more than 300 tonnes per day (average value on a quarterly basis)	Extraction of oil from rapeseed and refining of crude rape and sunflower oils. Use of hexane to extract remaining oil from pressed rapeseed and sediment and then subsequent separation and recovery of hexane to leave meal.	From receipt of raw materials to dispatch of finished product, including seed preparation (pressing, extraction, distillation, degumming, desolventising and drying), refining (super degumming, caustic refining/neutralisation, bleaching, deodourisation, winterisation), and storage of crude and finished oils.
AR2	Section 1.1 Part A(1)(a) Burning any fuel in an appliance with a rated thermal input of 50 MW or more	Combustion of fuel to provide steam and heating for the process. Burning natural gas and gas oil in combustion plant rated at combined thermal input of approximately 150 MW.	From receipt of fuel to emission of combustion products.
AR3	Section 5.4 Part A(1)(a)(ii) Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day by physico-chemical treatment	Physico-chemical treatment of process effluent by dissolved air flotation	From the receipt of effluent to discharge of treated effluent to public foul sewer
Directly Associated Activity			
AR4	Raw materials storage and handling	Storage and handling of raw materials.	From receipt of raw materials to dispatch for use within the facility.
AR5	Waste storage and disposal	Storage and disposal of waste.	From generation of waste to dispatch off site.
AR6	Odour abatement	Collection and treatment of air from the buildings or plant using abatement system prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere. Collection and treatment of air from the buildings or plant using abatement system – 6x biofilters, thermal oxidiser and scrubber system

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 and 2.10 given in pages 8 - 16, 19 - 20, 23 and 70 - 74.	21/04/2005
Application EPR/QP3331PQ/V002	Response to Section 3 – Operating Techniques, Part C3 of the application form, and supporting documents; dated 18/06/2021.	21/06/2021

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/QP3331PQ/V002	Odour Management Plan, March 2022 and additional detail response to S5 notice requesting additional information	28/03/2022 & 13/07/2022

Table 1.3 Improvement programme		
Reference	Requirement	Date
IP1	The Operator shall provide a report in writing to the Agency detailing the monitoring method used to determine effluent flow at S1. The monitoring method shall be approved in writing by the Agency.	Complete
IP2	The Operator shall provide the Agency with written proposals for a programme of monitoring for release of particulate matter from emission points A7, A11, A12, A13 and A15. Monitoring shall be carried out to an appropriate recognised standard. The proposals shall include justification for the frequency and method of monitoring and a justification for the exclusion of any of the emissions points as appropriate.	Complete
IP3	The Operator shall carry out monitoring of 4-pentenenitrile discharged from point S1 to an appropriate recognised standard and assess the likely impact, if any, on the environment. A summary of the assessment shall be sent to the Agency in writing together with a timetable to implement any improvements required to minimise impact.	Complete
IP4	The Operator shall carry out monitoring of oxides of nitrogen and particulate matter from emission point A4 and A13 using an appropriate recognised standard to be agreed by the Agency in writing. Results shall be submitted to the Agency in writing.	Complete
IP5	The Operator shall develop and maintain an odour management plan, summarising the actions to be taken to minimise odour under both normal and abnormal operating conditions with regard to the requirements set out in the Agency Guidance Note IPPC S6.10 Section 2.2.6, Dec. 2002. This plan shall assess the measures that are in place to prevent or reduce odour. Upon completion of the odour management plan a summary of the document shall be submitted to the Agency in writing and shall include time scales for any remedial action required.	Complete
IP6	The Operator shall assess their documented system of environmental management techniques, having regard to the Agency Guidance Note IPPC S6.10 Section 2.3, October 2003. A summary of the assessment shall be submitted to the Agency in writing together with a timetable to implement any necessary changes identified.	Complete
IP7	The Operator shall undertake detailed air dispersion modelling for releases of oxides of nitrogen from A1, A2 and A3 when firing on natural gas to further assess impacts on human health and ecological receptors. A report shall be submitted in writing to the Agency and shall include, but not be limited to, the effects of conversion of nitric oxide to nitrogen dioxide. The electronic input files of the model shall also be submitted to the Agency.	Complete
IP8	The Operator shall carry out an assessment of the options available for reducing oxides of nitrogen (NOx) and carbon monoxide from the emission point A1, A2 and A3. A summary of the assessment shall be submitted to the Agency in writing together with a timetable to implement any necessary changes identified.	Complete

Table 1.3 Improvement programme		
Reference	Requirement	Date
IP9	The Operator shall undertake an assessment of the surfacing and containment measures on site. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.10, October 2003. A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of any improvements shall be approved by the Agency.	Complete
IP10	The operator shall demonstrate to the Agency that the pH meter used for continuous monitoring of pH on S1, is fit for purpose by comparing the manufacturers stated performance of the pH meter with the performance criteria for equivalent equipment having an MCERTS conformance certificate as given in document ' Continuous water monitoring equipment part 2: Performance Standards for on-line analysers, Turbidity and pH meters; ammonia, COD, TOC, dissolved O2, total phosphorous, nitrate and total oxidised nitrogen analysis version 1, February 2003'. Where this comparison shows that the pH meter does not meet the criteria in the above document, the operator shall propose a timescale whereby either the pH meter will be able to meet the criteria or for the purchase of suitable replacement equipment. The timescale for implementation of any improvements shall be approved by the Agency.	Complete
IP11	The Operator shall assess the current method for effluent flow at point S1 with the requirements given in the MCERTS standard 'Minimum requirements for the self-monitoring of effluent flow' version 2, Aug 2004. A written report shall be provided to the Agency detailing how this standard is to be achieved and shall include timescales for implementation.	Complete
IP12	The Operator shall undertake an assessment of all oil storage containers having regard to Agency Guidance Note IPPC S6.10 Section 2.2.5, October 2003 and the Control of Pollution (Oil Storage) Regulations 2001. A summary of the Agency in writing timescales for any improvements identified	Complete
IP13	Provide to the Agency a list of the solvents used within the SED installation containing details of the risk phases of these solvents and the current consumption of these as defined by the Solvent Emission Regulations 2004.	Complete
IP14	The Operator shall undertake an assessment of subsurface structures and their potential to cause fugitive emissions to surface water and ground water. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.10, October 2003. A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of any improvements shall be approved by the Agency.	Complete
IP15	Provide the Agency with a report detailing the proposals for the operator meet the requirements of the SED regulations as set in the condition below.	Complete
IP16	Provide the Agency with a report confirming that the operator has fully met the requirements of the SED regulations.	Complete

Table 1.3 Improvement programme		
Reference	Requirement	Date
IC 17	<p>Review of odour abatement plant</p> <p>The operator shall carry out a review of the new thermal oxidiser and scrubber on site, in order to verify the assumptions made in the application (including H1 assessment) and determine its effectiveness. This will include a revised H1 assessment to verify that the SO₂ screens out and propose appropriate ELV(emission limit value) for VOC, H₂S and CO for approval.</p> <p>Within 1 month of the completion of the above the operator shall submit a written report to the Environment Agency for approval, to review the effectiveness of odour abatement on site, to include but not limited to:</p> <ul style="list-style-type: none"> • Abatement stack monitoring results • Odour monitoring results at the site boundary • Records of odour complaints and odour related incidents since commissioning. • Proposed any improvements required and a timeframe for implementation. 	Within 3 months of implementation
IC18	<p>The operator shall complete a trial of up to 6 months in duration, to assess the implications of rerouting emissions from the odour abatement system OAS (emission point A10) to emission point A14.</p> <p>The operator shall inform the Environment Agency 3 week prior the commencement of the trial.</p> <p>Should the trial result in a significant increase in odour emissions the operator shall notify the Environment Agency and cease the trial with immediate effect. The trial shall recommence on agreement with the Environment Agency.</p> <p>Following the completion of the trial, the operator shall report the findings to the Environment Agency. The operator shall confirm any proposed changes and provide an H1 assessment, including proposed ELVs for approval.</p>	Within 1 month of trial completion
IC 19	The operator shall install an interceptor prior to discharge point W1. The operator shall inform the environment agency when the works are complete.	31/12/2023

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

Table S2.2 Permitted waste types and quantities accepted for treatment	
Maximum quantity	The total quantity of waste accepted at the site for the above activity shall be less than 3,000 m ³ a year.
Waste code	Description
16	Wastes not otherwise specified in the list
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01 – wastewater accepted from Edible Oils Limited only.

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location*	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Gas turbine and waste heat boiler	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	140 mg/m ³	Periodic	biannual	EN 14792
A2	Gas turbine and waste heat boiler	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	140 mg/m ³	Periodic	biannual	EN 14792
A3	Gas turbine and waste heat boiler	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	140 mg/m ³	Periodic	biannual	EN 14792
A6	Seed unloader	Total particulate	50 mg/m ³	Periodic	annual	BS EN 13284-1
A8	Raw seed screeners, dry ingredients store and bleaching filter aspiration	Total particulate	50 mg/m ³	Periodic	annual	BS EN 13284-1
A9	Flaking roll aspiration	Total particulate	50 mg/m ³	Periodic	annual	BS EN 13284-1
A10	Seed prep rotary tube conditioner and expellers	Total particulate	50 mg/m ³	Periodic	annual	BS EN 13284-1
		VOC as TOC	-	30-minute mean	biannual	BS EN 13526: 2001
A12	Cake conveyor aspiration	Total particulate	-	-	-	-
A14	Drying and cooling decks (includes A28 when on bypass)	Total particulate	50 mg/ m ³	Periodic	annual	BS EN 13284-1
		VOC as TOC	-	30-minute mean	biannual	BS EN 13526: 2001

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location*	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A16	Talc storage vent	Total particulate	No limit set	-	-	-
A21	High pressure boiler	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	No limit set	-	biannual	EN 14792
A22 – A27	Meal silo vents	Total particulate	No limit set	-	-	-
A28	Thermal oxidiser and scrubber stack	VOC as TOC	No limit set	30-minute mean	biannual	BS EN 12619
		CO	No limit set	Hourly	Biannual	EN 15058
		SO ₂	220mg/ m ³	Hourly	Biannual	BS EN 14791
		H ₂ S	No limit set	-	During by-pass operation	-
*All emission points as shown on Figure 4.1, included in Application EPR/QP3331PQ/V002 - Supporting information document						

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1	Cooling tower blowdown and uncontaminated surface water run off	Temperature	30°C	Spot sample	Monthly	Not applicable
		pH	5-9	Spot sample	Monthly	BS6068-2.50
W2	Uncontaminated surface water run off	No parameter set	No limit set	-	-	-

Table S3.3 Point source emissions to sewer						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1	Effluent treatment plant	No parameter set	No limit set	-	-	-

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Point source emissions to air Parameters as required by condition 3.5.1	A1, A2, A3, A6, A8, A10, A12, A14, A21, A28	Every 12 months	1 January
Point source emissions to water (other than sewer) Parameters as required by condition 3.5.1	W1	Every 6 months	1 January, 1 July

Parameter	Units
Production of crude rape oils from rapeseed	tonnes
Production of rapemeal from rapeseed	tonnes
Total production of edible oils from crude rape	tonnes
Production of edible rape oils from crude rape oil	tonnes

Parameter	Frequency of assessment	Units
Waste disposal and/or recovery per tonne of rapeseed input processed	Annual	tonnes waste / tone rapeseed input
Waste disposal and/or recovery per tonne of total edible oils produced	Annual	tonnes waste / tonne edible oils produced
Water usage	Annual	m ³ / tonne edible oils produced
Energy consumption per tonne of rapeseed input processed	Annual	MWh energy / tonne rapeseed input
Energy consumption per tonne of total edible oils produced from crude rape and sunflower oils	Annual	MWh energy / tonne edible oils produced
Hexane consumption per tonne of rapeseed input processed	Annual	tonnes hexane / tonne rapeseed input

Parameter	Reporting form	Form version number and date
Point source emissions to air	Emissions to Air Reporting Form, or other form as agreed in writing by the Environment Agency	16/12/2022
Point source emissions to water (other than sewer)	Emissions to Water Reporting Form, or other form as agreed in writing by the Environment Agency	16/12/2022

Table S4.4 Reporting forms		
Parameter	Reporting form	Form version number and date
Water usage	Water Usage Reporting Form, or other form as agreed in writing by the Environment Agency	16/12/2022
Energy usage	Energy Usage Reporting Form, or other form as agreed in writing by the Environment Agency	16/12/2022
Other performance parameters	Other performance parameters, or other form as agreed in writing by the Environment Agency	16/12/2022

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

(d) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“disposal” means any of the operations provided for in Annex I to the Waste Framework Directive.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

Pests” means Birds, Vermin and Insects.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“recovery” means any of the operations provided for in Annex II to the Waste Framework Directive.

“Waste code” means the six-digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from gas engines or gas turbines, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 15% dry for liquid and gaseous fuels ; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content “year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT

Variation application number
EPR/QP3331PQ/V003