

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Argent Energy (UK) Limited
Argent Biodiesel Stanlow Plant
Oil Sites Road
Ellesmere Port
Cheshire
CH65 4BD

Variation application number

EPR/LP3233DK/V004

Permit number

EPR/LP3233DK

Argent Biodiesel Stanlow Plant

Permit number EPR/LP3233DK

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.

Changes introduced by this variation notice/statutory review

This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for the production of large volume organic chemicals. The opportunity has also been taken to consolidate the original permit and subsequent variations.

The Industrial Emissions Directive (IED) came into force on 7th January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) conclusions as described in the Commission Implementing Decision. The BAT conclusions for production of large volume organic chemicals were published on 07 December 2017 in the Official Journal of the European Union (L323) following a European Union wide review of BAT, implementing decision 2017/2117/EU of 21 November 2017.

Where appropriate, we also considered other relevant BAT Conclusions published prior to this date but not previously included in a permit review for the Installation:-

Common waste water and waste gas treatment/management systems in the chemical sector, published 09 June 2016

The BAT Conclusions for this installation which apply from 7th December 2021 are:
Production of Large Volume Organic Chemicals: BATc 2, 8, 10, 11, 14, 16-19

Common waste water and waste gas treatment/management systems in the chemical sector:
BATc 1-16, 19-21

The schedules specify the changes made to the 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.

Brief Description of the process

The main features of the permit are as follows:

The Argent Biodiesel Stanlow Plant can produce up to 90,000 tonnes/year biodiesel from up to 139,200 tonnes/year of methyl ester from unprocessed and pre-processed waste fats, oils and greases (FOGs) (including separated FOG materials from sewer cleaning activities and tallow). There are two pre-treatment plants where the FOGs are initially screened, separated and filtered to remove solids and water. Tallow is sterilised before processing to satisfy the requirements of Animal By-Products legislation. They are then esterified with methanol in the biodiesel plant, which is a Section 4.1 Part A(1)(a)(ii) activity. The resulting methyl esters are separated from residual water, methanol and glycerine by distillation, coalescence and settlement. The processes generate waste glycerine, which will be sent off-site for further recovery, and potassium sulphate.

Process water is collected for treatment in a dissolved air flotation plant with a maximum capacity of 300 m³/day, which is a Section 5.4 Part A(1)(a)(ii) activity, prior to discharge into the surrounding Essar Oil (UK) Limited Stanlow Manufacturing Complex wastewater system (Unit 78) and subject to further treatment prior to discharge to public sewer.

The process requires steam and heat, which are provided by a thermal oil unit (3.8 MWth) fuelled by mineral diesel and three steam boilers (9.4 and 2 x 13 MWth input) fuelled by refinery gas, non-waste biofuel oil (still bottoms from the manufacture of biodiesel) or conventional mineral oil, which emit combustion gases to air through stacks. Odour control is provided by undertaking most activities on the installation inside buildings with ventilation systems connected to water scrubbers and bio-filter, emitting through stacks. There is an external bunded tank farm for raw materials and products.

Waste solids are disposed off-site to landfill and incineration, or recovered where possible. Some waste streams are mixed to provide a feedstock for off-site anaerobic digestion.

Clean surface water run-off from the site is collected and discharged to the River Gowy (emission points W3 and W4) via a balancing pond and swales.

The site is located in an industrial area of Ellesmere Port associated with Stanlow Oil Refinery at national grid reference SJ 43255 76391. The nearest village is Ince, located 1.5 km to the east. The site is approximately 3 ha in area and located in a relatively flat and low-lying area in the floodplain of the River Gowy and Manchester Ship Canal, which lie 132 m west and 340 m north, respectively. The Mersey Estuary lies 450 m north of the site, which is designated as a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site.

Argent Energy (UK) Limited operates an environmental management system based on ISO14001.

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 EPR/LP3233DK/V004	Duly made 08/06/16	Application for biodiesel pre-treatment facility.
Additional information received	17/06/16	Drainage drawing, noise assessment.
Additional information received	23/06/16	Updated drainage drawing.
Additional information received	24/06/16	Confirmation of site postcode and process details.
Additional information received	13/07/16	Tank list.
Additional information received	14/07/16	Material safety data sheets for materials stored in bulk, bulk material handling and emergency spill response procedures.
Additional information received	25/07/16	Response to Schedule 5 Notice, dated 30/06/16. Additional details for noise assessment, air quality assessment and environmental risk assessment (H1 model, energy consumption, global warming potential and waste assessment).
Additional information received	26/07/16	Specifications for underground tanks, confirmation of site name, sewer discharge point location, bund water management and surface water management.
Additional information received	30/08/16	Response to Schedule 5 Notice, dated 12/08/16. Additional modelling of effluent in H1, revised Odour Management Plan, waste pre-acceptance and acceptance, site layout drawing, updated tank list, Accident Management Plan.
Additional information received	15/09/16	Revised site layout drawing.
Additional information received	16/09/16	Confirmation that penstock valves will be installed at the inlets to Swales A, B & C.

Status log of the permit		
Description	Date	Comments
Additional information received	23/09/16	Justification of proposed ELVs for A1 & A2, confirmation of ammonia analysis method and frequency for sewer discharge.
Permit determined EPR/LP3233DK	18/10/16	Permit issued to Argent Energy (UK) Limited.
Application EPR/LP3233DK/V004 (variation and consolidation)	Duly made 27/01/17	Application to vary the permit to include Phase 2 operations (additional biodiesel pre-treatment and biodiesel production plant).
Additional information received	15/03/17	Site layout plan showing emission points.
Additional information received	06/04/17	Stack temperature correction technical note and associated air modelling files.
Additional information received	19/05/17	Revised site layout plan showing emission points.
Additional information received	09/06/17	Response to Schedule 5 Notice, dated 16/05/17, plan showing raw materials storage, plan showing surface water monitoring locations, swale monitoring and bund water management procedure, additional modelling of process vents in H1, updated tank list, waste transfer notes, catalyst MSDS.
Additional information received	12/06/17	Response to Schedule 5 Notice, dated 16/05/17: Updated Site Condition Report.
Additional information received	16/06/17	Confirmation of construction detail of concrete-lined swale and balancing pond.
Additional information received	30/06/17	Updated Site Condition Report
Additional information received	04/07/17	Confirmation of primary control measures on combustion sources.
Additional information received	05/07/17	Confirmation of storage of moveable containers of raw material, waste and product, response to request to identify waste storage area in Phase 2.
Additional information received	11/07/17	Revised materials storage plan and surface water sampling plan.
Variation determined EPR/LP3233DK/V002	27/07/17	Permit variation issued.
Application EPR/LP3233DK/V004 (variation)	Duly made 24/11/17	Administrative variation to add waste codes.
Variation determined EPR/LP3233DK/V003	05/01/18	Permit variation issued.
Regulation 61 Notice (Notice requiring information for statutory review of permit as EPR/LP3233LK/V004)	Dated 16/05/18	Response received 22/08/18
Request for further information	11/10/18	Requested response to CWW BATc and Soil/Groundwater, Water Framework Directive and permit condition review questions. Response received 31/01/19

Status log of the permit		
Description	Date	Comments
Request for further information	04/03/20	Request for further information on LVOC and CWW BATc and Soil/Groundwater, Water Framework Directive and permit condition review questions. Response received 01/04/20
Request for further information	02/06/20	Further clarification of previous request for information response. Response received 16/06/20
EPR/LP3233DK/V004 (variation and consolidation)	Environment Agency Initiated Variation	Statutory review of permit occasioned by LVOC BAT Conclusions published 07 December 2017
Variation determined EPR/LP3233DK/V004 (Billing Ref: PP3739QQ)	29/01/21	Varied and consolidated permit issued

Other permits relating to this installation		
Operator	Permit number	Comments
Argent Energy (UK) Limited	EPR/FP3139FN Stanlow Manufacturing Complex	Original permit EPR/NP3237LS issued to Shell UK Oil Products Ltd 23/12/08 Permit transferred in full from Shell UK Oil Products Ltd 01/08/11

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/LP3233DK

Issued to

Argent Energy (UK) Limited (“the operator”)

whose registered office is

236-240 Biggar Road

Newarthill

Motherwell

ML1 5FA

company registration number **SC220609**

to operate a regulated facility at

Argent Biodiesel Stanlow Plant

Oil Sites Road

Ellesmere Port

Cheshire

CH65 4BD

to the extent set out in the schedules.

The notice shall take effect from 29/01/2021

Name	Date
Philip Lamb	29/01/2021

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/LP3233DK

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/LP3233DK/V004 authorising,

Argent Energy (UK) Limited (“the operator”),

whose registered office is

236-240 Biggar Road

Newarthill

Motherwell

ML1 5FA

company registration number **SC220609**

to operate an installation at

Argent Biodiesel Stanlow Plant

Oil Sites Road

Ellesmere Port

Cheshire

CH65 4BD

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

Name	Date
Philip Lamb	29/01/2021

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 green 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 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.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

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 5 years 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.

3.4 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, 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.

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.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

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.

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 4.1 Part A(1)(a)(ii) Producing organic chemicals containing oxygen	<u>Biodiesel Pre-treatment (including HP Plant)</u> The production of methyl ester by esterification of waste fats, oils and greases (FOGs) (including tallow). Separation of methyl esters from residual water, methanol and glycerine by distillation, coalescence and settlement. Methyl esters may be sent off-site for further recovery as biodiesel. Waste glycerine sent off-site for further recovery or used elsewhere on-site. Reaction vessels: Phase 1 pre-esterification reactors 1 & 2 (production capacity of each > 2,000 tpa).	From receipt of raw materials and waste to storage and despatch of methyl ester and glycerine. FOGs from AR6 and AR7 in this table only. Production of up to 90,000 tonnes/year methyl ester for further recovery as biodiesel.
AR2	Section 4.1 Part A(1)(a)(ii) Producing organic chemicals containing oxygen	<u>Processed Oil Plant</u> The production of glycerised oil by glycerolysis of waste FOGs (including tallow) using glycerine. Transition metal catalyst may be used. Separation of glycerised oil from residual water, spent catalyst and glycerine by distillation, coalescence and settlement. Waste glycerised oil may be sent off-site for further recovery as biodiesel. Waste glycerine will be reused in the process. Reaction vessels: Argent North glycerolysis reactors 1 & 2 (production capacity of each > 2,000 tpa).	From receipt of raw materials and waste to storage and despatch of glycerised oil. FOGs from AR6 or AR7 in this table or imported. Glycerine from on-site operations or imported. Production of up to 51,000 tonnes/year glycerised oil for further recovery as biodiesel.
AR3	Section 4.1 Part A(1)(a)(ii) Producing organic chemicals containing oxygen	<u>Biodiesel Refinery Pre-esterification</u> The production of esterified oil from methyl esters produced by AR1 in this table (and glycerised oil produced by AR2 in this table if free fatty acid content too low). Separation of esterified oil from residual water by settlement. Esterified oil ready for biodiesel production. Biodiesel Refinery pre-esterification reactors 1 & 2	From receipt of raw materials and waste to storage and despatch of esterified oil. Inputs from AR1 and AR2 in this table or imported. Production of up to 90,000 tonnes/year esterified oil for further recovery as biodiesel.

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
		(production capacity of each > 2,000 tpa).	
AR4	Section 4.1 Part A(1)(a)(ii) Producing organic chemicals containing oxygen	<u>Biodiesel Production Plant</u> The production and purification of biodiesel. Trans-esterification of glycerised oil and esterified oil using potassium methanolate catalyst. Separation of methyl esters from residual water, methanol and glycerine by distillation and settlement to produce biodiesel. Distillate bottoms from second column known as biofuel oil (BFO). Waste glycerine processed further to remove water and methanol and used in AR2 in this table. Potassium sulphate generation. Biodiesel production trans-esterification reactors 1 - 4 (production capacity of each > 2,000 tpa).	From receipt of raw materials and waste to storage and despatch of biodiesel. Inputs from AR2 and AR3 in this table only. Production of up to 90,000 tonnes/year biodiesel.
AR5	Section 5.4 Part A(1)(a)(ii) Disposal, recovery or a mix of disposal and recovery of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment	D9 - Disposal of non-hazardous waste by dissolved air flotation and disposal to foul sewer.	From generation of effluent to its treatment and disposal to sewer. Effluent discharge of up to 28 m ³ /hour with a maximum daily flow of 672 m ³ /day.
Directly Associated Activity			
AR6	Receipt, storage and pre-treatment of FOGs	From receipt of FOGs, pre-treatment by screening, sieving, separation and rotary drum vacuum filtration to storage prior to esterification. Management and storage of wastes generated by this activity.	Receipt of up to 108,000 tonnes/year of non-hazardous waste FOGs. Permitted waste types defined in Table S2.2 of this permit. Total amount of waste FOGs and tallow present on site at any time that have not been esterified shall not exceed 3,674 m ³ .
AR7	Receipt, storage, sterilisation and pre-treatment of tallow	From receipt of tallow, pre-treatment by sterilisation, sieving, separation and rotary drum vacuum filtration to storage prior to esterification. Management and storage of wastes generated by this activity.	Receipt of up to 31,200 tonnes/year non-hazardous waste tallow. Permitted waste types defined in Table S2.2 of this permit. Total amount of waste FOGs and tallow present on site at any time that have not been esterified shall not exceed 3,674 m ³ .

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
AR8	Storage and use of wood flour as filtration medium	Receipt of wood flour to Wood Flour Store (as shown on the site plan in Schedule 7 to this permit), storage and transfer to rotary vacuum drum filters.	Storage in sealed bags in separate enclosed room with extraction and air filtration systems to minimise airborne dust.
AR9	Combustion plant fuelled on refinery gas	Operation of a steam boiler with a net rated thermal input of 9.4 MWth (Phase 1 Boiler) to provide steam supply to site.	From receipt of fuel to combustion in boiler.
AR10	Combustion plant fuelled on refinery gas	Operation of a thermal oil unit with a net rated thermal input of 3.8 MWth to provide heating for pre-esterification reaction and associated plant.	From receipt of fuel to combustion in thermal oil unit.
AR11	Combustion plant fuelled on refinery gas	Operation of a steam boiler with a net rated thermal input of 13 MWth (Phase 2 Boiler 1) to provide steam supply to site.	From receipt of fuel to combustion in boiler. Not operational if Phase 2 Boiler 2 is operating at full capacity.
AR12	Combustion plant fuelled on biofuel oil or conventional mineral oil	Operation of a steam boiler with a net rated thermal input of 13 MWth (Phase 2 Boiler 2) to provide steam supply to site.	From receipt of fuel to combustion in thermal oil unit. Only operational at full capacity if Phase 2 Boiler 1 not operating, or a maximum of 25% capacity if Phase 2 Boiler 1 is operating. Specification of fuel is defined in Schedule 2, Table S2.1 of this permit.
AR13	Combustion plant fuelled on mineral diesel	Operation of a thermal oil heater with a net rated thermal input of 4.65 MWth to provide heating for the glycerolysis process.	From receipt of fuel to combustion in thermal oil heater.
AR14	Abatement	Operation of the Odour Control Unit and associated plant and equipment.	From capture of emissions from the installation, their treatment by water scrubbing and biofiltration to emission to air.
AR15	Waste handling and storage	Handling and storage of solid wastes generated by the pre-treatment of oil, the pre- and trans-esterification processes, the glycerolysis process, and the treatment of waste water.	Storage of solid wastes comprising coarse screenings, drum screenings, tricanter solids, waste wood flour and filter press solids in separate labelled bays in the Waste Storage Area (as shown on the site plan in Schedule 7 of this permit) on an impermeable surface with a sealed drainage system. Any containers containing wastes or residues of wastes shall be stored within secondary containment bunds with collision protection and on an impermeable surface with sealed drainage system.

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
AR16	Raw material storage	Storage of raw materials, including water softening agents, acids, potassium hydroxide, methanol, boiler chemicals, cooling tower chemicals, wastewater treatment chemicals, glycol, diesel and biofuel oil, transition metal catalyst.	From receipt of raw materials to despatch for use within the facility. Any containers containing potentially polluting raw materials shall be stored within secondary containment bunds with collision protection and on an impermeable surface with sealed drainage system.
AR17	Surface water drainage	Surface water drainage prior to discharge from the installation via swales and balancing pond.	Discharge to River Gowy via swales and balancing pond.
AR18	AD Soup preparation	Mixing of liquid waste streams to generate a feedstock optimised for anaerobic digestion	Mixing and storage of liquid waste streams to despatch off-site

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/LP3233DK/A001	All supporting information documents referenced in response to Part B2 and B3 of the application form and all duly making responses.	Duly Made 08/06/16
Additional Information	Drainage layout drawing.	17/06/16
Additional Information	Confirmation of process details and tricanter operating instructions.	24/06/16
Additional Information	<ul style="list-style-type: none"> Material safety data sheets Procedures for delivery of methanol, out-loading of esterified oils and glycerine Spill Prevention & Emergency Response Plan Confirmation of drainage system details. 	14/07/16
Response to Schedule 5 Notice dated 30/06/16	Response to question 11 detailing odour abatement.	19/07/16
Response to Schedule 5 Notice dated 30/06/16	Section 6 of Noise Assessment v4 dated 22/07/16.	25/07/16
Additional Information	<ul style="list-style-type: none"> Specifications for process effluent tank and FOG reception pits Confirmation of location of sewer discharge point Description of bund water management and surface water management. 	26/07/16
Response to Schedule 5 Notice dated 12/08/16	<ul style="list-style-type: none"> Responses to questions 8, 9, 11, 12, 13, 14, 15, 16, 18, 19 & 20 and Odour Management Plan rev00 dated Aug16 concerning management to minimise odour. Procedure for Waste Pre-acceptance and Technical assessment v01 dated 16/05/2016 in response to questions 21, 22 & 23 on waste pre-acceptance and acceptance. 	30/08/16

Table S1.2 Operating techniques		
Description	Parts	Date Received
	<ul style="list-style-type: none"> • Procedure for Acceptance of Waste for Treatment v1 dated 12/06/2016 in response to questions 21, 22 & 23 on waste pre-acceptance and acceptance. • Response to question 21 on laboratory quality assurance and quality control. • Response to question 24: Site Layout Plan. • Response to question 25: Tank list. • Response to question 26: Accident Management Plan issue 001 dated August 2016. 	
Variation Application EPR/LP3233DK/V002	All supporting information documents referenced in response to Part C2 and C3 of the application form and all duly making responses.	Duly Made 27/01/17
Response to Schedule 5 Notice dated 16/05/17	<ul style="list-style-type: none"> • Responses to questions 1 - 4 on site infrastructure. • Responses to questions 5 - 8 on the Site Conditioning Report. • Responses to questions 9 & 10 on the H1 Assessment. • Responses to questions 11 & 12 on the BAT Assessment. • Response to question 13 on waste management. 	09/06/17 & 14/06/17
Additional Information	Construction detail of concrete-lined swale and balancing pond.	16/06/17
Additional Information	Site Condition Report Update dated June 2017 (for Phase 2).	30/06/17
Additional Information	Primary control measures for combustion plant.	04/07/17
Additional Information	Materials Storage Plan & Surface Water Sampling Plan.	11/07/17
Updated Response to Reg61 notice dated 16/05/18	Response to LVOC BATc 1-19 and CWW BATc 1-13	31/01/19
Response to request for further information dated 04/03/20	Further information in relation to LVOC BATc 6, 12, 19 and CWW BATc 2, 3 and 5	01/04/20
Response to request for further information dated 02/06/20	Further information in relation to CWW BATc 1, 13, 14, 15/16, 21, 23, Direct emission to River Gowy from swales, Soil and Groundwater risk assessment and Water Framework Hazardous Pollutants.	16/06/20

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1-IC9	Complete and deleted at permit review.	
IC10	<p><u>LVOC BAT Conclusion 18</u> The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving compliance with LVOC BAT Conclusion 18 concerning critical equipment before 07/12/21. The report shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Methodology for achieving BAT • Associated targets / timelines for reaching compliance by 07/12/21 	<p>Progress reports by:</p> <p>07/04/21 07/12/21</p> <p>Or otherwise as agreed in writing with the</p>

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> Any alterations to the initial plan (in progress reports). Refer to LVOC BAT Conclusions for a full description of the BAT requirement.	Environment Agency
IC11	<p>The operator shall submit a written proposal to the Environment Agency to undertake monitoring to investigate emissions from emission point S1, in relation to potential discharge of water to Essar's effluent treatment system. The objective of the monitoring is to establish the nature (including concentration) of any metals emissions to water via this emission point. The quantity of monitoring data considered shall be justified and be sufficient so as to demonstrate that the results are representative of emissions during normal operation of the installation.</p> <p>On receipt of written approval from the Environment Agency to the proposal, the operator shall carry out the monitoring to the agreed timescales and submit to the Environment Agency an interpretive report including the monitoring results and an interpretation of their significance in relation to impact on the eventual receiving water course. The report shall be submitted within three months of completion of the monitoring.</p>	30/06/21
IC12	<p><u>CWW BAT Conclusion 2</u> The operator shall submit, for approval by the Environment Agency, the relevant part of their environmental management system describing the characteristics of waste gas streams, including quantification, to meet the requirements of each factor in sections (a) to (d) CWW BAT Conclusion 2 part (iii); except where the operator can show evidence of why a factor is not relevant.</p>	30/06/21
IC13	<p><u>CWW BAT Conclusion 1</u> The operator shall submit to the Environment agency for approval a report describing how its Environmental Management System meets each CWW BAT Conclusion 1 features (i) to (xiv) (and linked BAT Conclusions 13, 20 and 22) in line with the Applicability note to the BAT Conclusion.</p>	07/06/21

Schedule 2 – Waste types, raw materials and fuels

Raw materials and fuel description	Specification
Non-waste biofuel oil to be used in Phase 2 Boiler 2 (AR12 in this permit)	Limited to biofuel oil generated on-site from the production of biodiesel in trans-esterification reaction vessels (activity reference AR4 in this permit) that is not classified as waste.
Diesel to be used in Phase 2 Boiler 2 (AR12 in this permit) or Phase 2 Thermal Oil Heater (AR13 in this permit)	Not exceeding 0.1% w/w sulphur content

Maximum quantity	Up to 31,200 tonnes/year tallow and 108,000 tonnes/year vegetable oil and edible oil and fat. Total waste accepted shall not exceed 139,200 tonnes/year.
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 03	Materials unsuitable for consumption or processing
02 02 99	Rendered animal fat (tallow)
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 04	Vegetable oil
02 03 05	Sludges from on-site effluent treatment
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 10	Combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 08	wastes from waste water treatment plants not otherwise specified
19 08 09	Grease and oil mixture from oil/water separation containing only edible oil and fats
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 25	Edible oil and fat

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 [Point A1 on site plan in Schedule 7]	Steam Boiler	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/Nm ³	-	Annual	BS EN 14792
		Sulphur dioxide	50 mg/Nm ³	-	Annual	BS EN 14791
A2 [Point A2 on site plan in schedule 7]	Thermal Oil Heater	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/Nm ³	-	Annual	BS EN 14792
		Sulphur dioxide	50 mg/Nm ³	-	Annual	BS EN 14791
A3 [Point A3 on site plan in schedule 7]	Odour Control Unit	No parameter set	No limit set	-	-	-
A4 [Point A4 on site plan in schedule 7]	Esterification Process Vent	No parameter set	No limit set	-	-	-
A5 [Point A5 on amended site plan in schedule 7]	Boiler 1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/Nm ³	-	Annual	BS EN 14792
		Sulphur dioxide	50 mg/Nm ³	-	Annual	BS EN 14791
A6 [Point A6 on amended site plan in schedule 7]	Boiler 2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/Nm ³	-	Annual	BS EN 14792
		Sulphur dioxide	100 mg/Nm ³	-	Annual	BS EN 14791
A7 [Point A7 on amended site plan in schedule 7]	Thermal Oil Heater	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	170 mg/Nm ³	-	Annual	BS EN 14792
		Sulphur dioxide	200 mg/Nm ³	-	Annual	BS EN 14791

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
A8 [Point A8 on amended site plan in schedule 7]	Argent North and Biodiesel Plant Process Vent	No parameter set	No limit set	-	-	-

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 emission to unnamed surface water ditch	Uncontaminated surface water from Swale C	No parameters set	No limit set	-	-	-
W2 on site plan in schedule 7 emission to unnamed surface water ditch	Uncontaminated surface water from Swales A & B	No parameters set	No limit set	-	-	-
W3 on site plan in schedule 7 emission to unnamed surface water ditch	Uncontaminated surface water from Balancing Pond	No parameters set	No limit set	-	-	-
W4 on site plan in schedule 7 emission to unnamed surface water ditch	Uncontaminated surface water from Eastern Swale	No parameters set	No limit set	-	-	-

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on site plan in schedule 7 emission to	Site effluent treatment plant	Flow	28 m ³ /hour and 672 m ³ /day	-	Continuous	MCERTS self-monitoring of

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Essar foul drainage system						effluent flow scheme
S1 on site plan in schedule 7 emission to Essar foul drainage system	Site effluent treatment plant	Ammonia	10 mg/l	24 hour composite	Daily	SCA blue book 48
S1 on site plan in schedule 7 emission to Essar foul drainage system	Site effluent treatment plant	COD	4,500 mg/l	24 hour composite	Daily	BS 6068-2.34
S1 on site plan in schedule 7 emission to Essar foul drainage system	Site effluent treatment plant	Suspended solids	500 mg/l	24 hour composite	Daily	BS EN 872
S1 on site plan in schedule 7 emission to Essar foul drainage system	Site effluent treatment plant	pH	6-10	-	Continuous	BS ISO 10523

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1	A1, A2, A5, A6 & A7	Every 12 months	1 January
Emissions to sewer Parameters as required by condition 3.5.1	S1	Every 12 months	1 January

Table S4.2: Annual production/treatment	
Parameter	Units
Esterified oil	tonnes
Glycerine	tonnes
Biodiesel	tonnes
Potassium sulphate	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	m ³
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form Air1 or other form as agreed in writing by the Environment Agency	01/01/21
Sewer	Form Sewer1 or other form as agreed in writing by the Environment Agency	01/01/21
Water usage	Form WaterUsage1 or other form as agreed in writing by the Environment Agency	01/01/21
Energy usage	Form Energy1 or other form as agreed in writing by the Environment Agency	01/01/21
Other performance indicators	Form Performance1 or other form as agreed in writing by the Environment Agency	01/01/21
Waste	Form Waste1 or other form as agreed in writing by the Environment Agency	01/01/21

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	EPR/LP3233DK
Name of operator	Argent Energy (UK) Limited
Location of Facility	Argent Biodiesel Stanlow Plant Oil Sites Road Ellesmere Port Cheshire CH65 4BD
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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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.

“annually” means once every year.

“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.

“BAT-AELs” means BAT-associated emission levels, i.e. the emission levels associated with the best available techniques for emissions to air and/or water, as set out in

“Common waste water and waste gas treatment/management systems in the chemical sector BAT Conclusions or CWW” means Commission Implementing Decision (EU) 2016/902 of 30 May 2016 establishing Best Available Techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for Common Waste Water And Waste Gas Treatment/ Management Systems in the Chemical Sector

“diffuse emissions” means non-channelled emissions which can result from ‘area’ sources (e.g. tanks) or ‘point’ sources (e.g. pipe flanges).

“disposal”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“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.

“EWC code” means the code number from the European Waste Catalogue.

“FOGs” means fats, oils and greases.

“fugitive emissions” means diffuse VOC emissions from ‘point’ sources.

“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.

“Hazardous property” has the meaning in Annex III of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“Large Volume Organic Chemicals BAT Conclusions or LVOC” means The Commission Implementing Decision (EU) 2017/2117 of 21 November 2017 establishing Best Available Techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the Production of Large Volume Organic Chemicals.

“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, as amended from time to time.

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

“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 Directive 2008/98/EC of the European Parliament and of the Council on waste.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

(a) no liquid will run off the surface otherwise than via the system;

(b) except where they may lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, 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

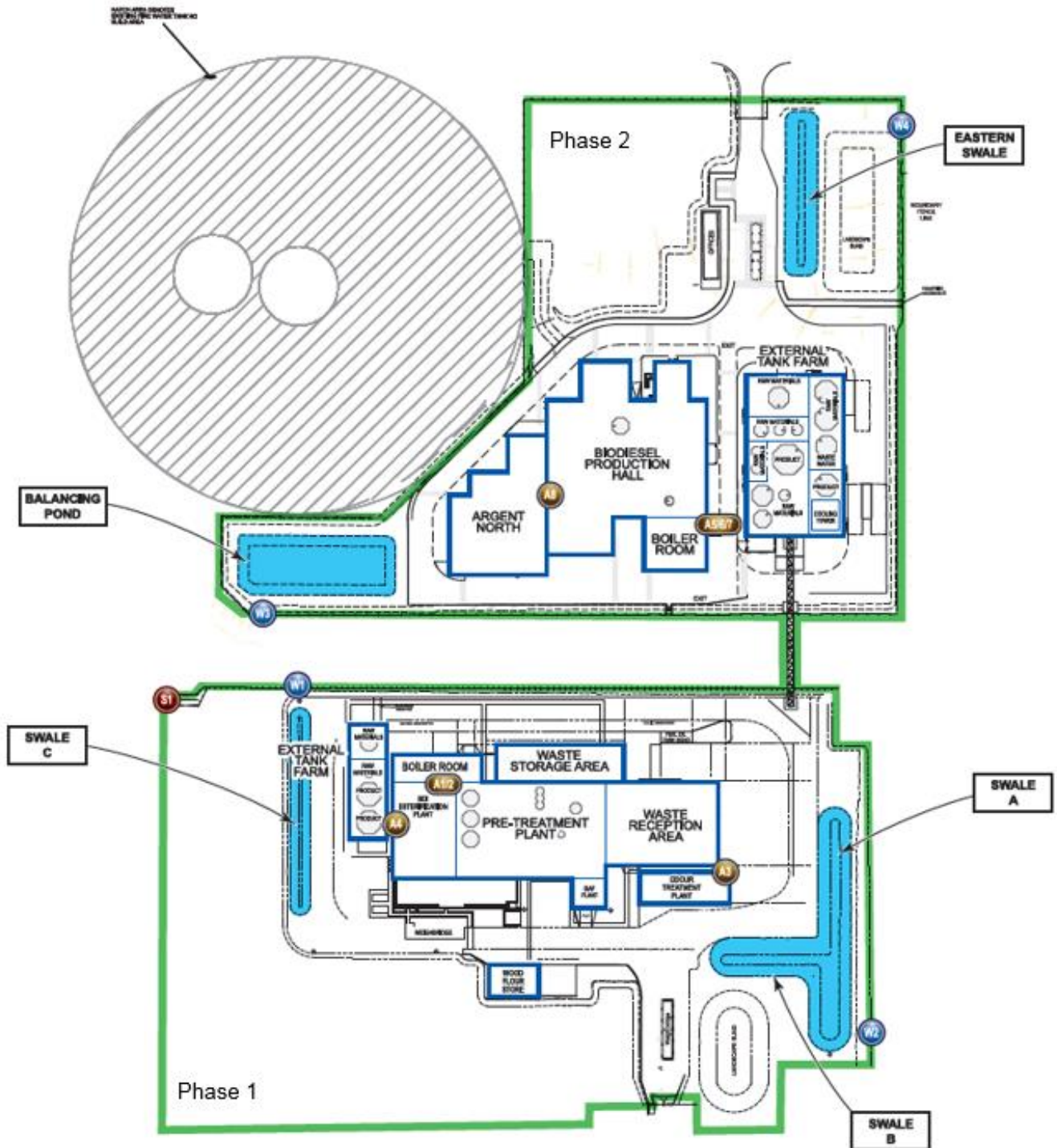
“year” means calendar year ending 31 December.

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 combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid 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.

Schedule 7 – Site plan



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END OF PERMIT

Permit Number: LP3233DK

Operator: Argent Energy (UK) Limited

Facility: Argent Biodiesel Stanlow Plant

Form Number: Air1 01/01/21

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
A1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/m ³			BS EN 14792		
A1	Sulphur Dioxide	50 mg/m ³			BS EN 14791		
A2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/m ³			BS EN 14792		
A2	Sulphur Dioxide	50 mg/m ³			BS EN 14791		
A5	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³			BS EN 14792		
A5	Sulphur Dioxide	50 mg/m ³			BS EN 14791		
A6	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/m ³			BS EN 14792		
A6	Sulphur Dioxide	100 mg/m ³			BS EN 14791		
A7	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	170 mg/m ³			BS EN 14792		
A7	Sulphur Dioxide	200 mg/m ³			BS EN 14791		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number: LP3233DK

Operator: Argent Energy (UK) Limited

Facility: Argent Biodiesel Stanlow Plant

Form Number: Sewer1 01/01/21

Reporting of emissions to sewer for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
S1	Flow	28 m ³ /hour and 672 m ³ /day	-		MCERTS self-monitoring of effluent flow scheme		
S1	Ammonia	10 mg/l	24 hour composite		SCA blue book 48		
S1	COD	4,500 mg/l	24 hour composite		BS 6068-2.34		
S1	Suspended solids	500 mg/l	24 hour composite		BS EN 872		
S1	pH	6-10	-		BS ISO 10523		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number: LP3233DK

Operator: Argent Energy (UK) Limited

Facility: Argent Biodiesel Stanlow Plant **Form Number: WaterUsage1 01/01/21**

Reporting of Water Usage for the year YYYY

Water Source	Usage (m ³ /year)	Specific Usage (m ³ /unit output)	Trends in Mains Water Usage		
			Year	Total Water Usage	Specific Usage (m ³ /unit output)
Mains water					
TOTAL WATER USAGE					

Operator's comments:

Signed

Date.....

(authorised to sign as representative of Operator)

Permit Number: LP3233DK

Operator: Argent Energy (UK) Limited

Facility: Argent Biodiesel Stanlow Plant Form Number: Energy1 01/01/21

Reporting of Energy Usage and Energy Efficiency for the year YYYY

Energy Source	Quantity Used	Primary Energy Usage (MWh)	CO2 produced (tonnes)
Electricity*	MWh		
Refinery gas	MWh		
Diesel	tonnes		
Other (Specify)	t		
Total	--		

* Conversion factor for delivered electricity to primary energy = 2.4

Year	Production (tonnes)	Primary Energy usage (MWh)	Total Primary Energy usage per unit output (MWh/t)	Primary Energy Electricity Usage per unit output (MWh/t)	Primary Energy Gas Usage per unit output (GJ/t)*	CO2 produced (tonnes)	CO2 tonnes per tonne unit output

* Energy in gas conversion factor used = (GJ/t)

Operator's comments:

Signed

Date.....

(authorised to sign as representative of Operator)

Permit Number: LP3233DK

Operator: Argent Energy (UK) Limited

Facility: Argent Biodiesel Stanlow Plant Form Number: Performance1 01/01/21

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	Units
Total raw material used	tonnes
Total waste inputs	tonnes
Total waste inputs per tonne of product	tonnes waste/tonne of product

Operator's comments:

Signed

Date..... (authorised to sign as representative of Operator)

Permit Number: LP3233DK

Operator: Argent Energy (UK) Limited

Facility: Argent Biodiesel Stanlow Plant Form Number: Waste1 01/01/21

Reporting of Waste Disposal and Recovery for the year YYYY

Waste Description	Disposal		Recovery		Trends in Waste Disposal and Recovery		
	D code	Tonnes	R code	Tonnes	Year	Total Waste (tonnes))	Waste per unit output
Hazardous Wastes							
Total Hazardous Waste	----		----				
Non-Hazardous Waste							
Total Non-hazardous Waste	----		----				
TOTAL WASTE	----		----				
Operator's comments:							

Signed

Date..... (authorised to sign as representative of Operator)