

# Permit with introductory note

## The Environmental Permitting (England & Wales) Regulations 2010

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

### **Permit number**

EPR/LP3233DK

# Argent Biodiesel Stanlow Plant

## Permit number EPR/LP3233DK

### Introductory note

#### This introductory note does not form a part of the permit

The main features of the permit are as follows:

The Argent Biodiesel Stanlow Plant will produce up to 75,000 tonnes/year of methyl ester from waste fats, oils and greases (FOGs) (including tallow), which will be sent off-site for further recovery as biodiesel. The site is located in an industrial area of Ellesmere Port associated with Stanlow Oil Refinery. 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.

Up to 116,000 tonnes/year of FOGs will be screened, separated and filtered to remove solids and water. Tallow will be sterilised before processing to satisfy the requirements of Animal By-Products legislation. FOGs are then esterified with methanol, 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. Waste glycerine will be sent off-site for further recovery.

Process water will be treated in a dissolved air flotation plant with a maximum capacity of 300 m<sup>3</sup>/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 and subject to further treatment prior to discharge to public sewer. Waste solids will be disposed off-site to landfill and incineration, or recovered where possible. The process requires steam and heat, which are provided by a steam boiler (9.4 megawatts thermal input (MWth)) and a thermal oil unit (3.8 MWth), which emit combustion gases to air through a common stack. Odour control is provided by undertaking most activities on the installation inside a building with a ventilation system connected to a water scrubber and bio-filter, emitting through a stack.

Argent Energy (UK) Limited has an existing environmental management system for this activity at another site, which will be extended to cover this site.

The status log of the 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/A001	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 30/06/2016. Additional details for noise assessment, air quality assessment and environmental risk assessment (H1

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
		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 12/08/2016. 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.
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 (Billing ref. LP3233DK)	18/10/16	Permit issued to Argent Energy (UK) Limited.

End of introductory note

# Permit

## The Environmental Permitting (England and Wales) Regulations 2010

### Permit number

**EPR/LP3233DK**

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

**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.

<b>Name</b>	<b>Date</b>
<b>Brenda Graham</b>	<b>18/10/2016</b>

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.

### **2.5 Pre-operational conditions**

- 2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

### **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 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 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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 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.

4.3.4 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.

4.3.5 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:

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

4.3.6 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.

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

## **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

<b>Table S1.1 activities</b>		
<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
S4.1 Part A(1)(a)(ii) Organic Chemicals	The generation of methyl ester by esterification from 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 sent off-site for further recovery as biodiesel. Waste glycerine sent off-site for further recovery.	From receipt of raw materials and waste to storage and despatch of methyl ester and glycerine. Generation of up to 75,000 tonnes/year methyl ester for further recovery as biodiesel.
S5.4 Part A(1)(a)(ii) Disposal, recovery or a mix of disposal and recovery of non-hazardous waste	D9 - Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment by dissolved air floatation and disposal to foul sewer.	From generation of effluent to its treatment and disposal to sewer. Effluent discharge of up to 28 m <sup>3</sup> /hour with a maximum daily flow of 672 m <sup>3</sup> /day.
<b>Directly Associated Activity</b>		
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 90,000 tonnes/year of non-hazardous waste FOGs. Permitted waste types defined in Table S2.2. Total amount of waste FOGs and tallow present on site at any time that have not been esterified shall not exceed 2,500 m <sup>3</sup> .
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 26,000 tonnes/year non-hazardous waste tallow. Permitted waste types defined in Table S2.2. Total amount of waste FOGs and tallow present on site at any time that have not been esterified shall not exceed 2,500 m <sup>3</sup> .
Storage and use of wood flour as filtration medium	Receipt of wood flour, 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.
Combustion plant fuelled on refinery gas	Operation of a steam boiler with a net rated thermal input of 9.4 MWth to provide steam supply to site.	From receipt of fuel to combustion in boiler.

<b>Table S1.1 activities</b>		
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.
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.
Waste handling and storage	Handling and storage of solid wastes generated by the pre-treatment of oil, the esterification 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 on an impermeable surface with a sealed drainage system.
Surface water drainage	Surface water drainage prior to discharge from the installation via swales.	Discharge to River Gowy via swales.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	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"> <li>• Material safety data sheets</li> <li>• Procedures for delivery of methanol, out-loading of esterified oils and glycerine</li> <li>• Spill Prevention &amp; Emergency Response Plan</li> <li>• Confirmation of drainage system details.</li> </ul>	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"> <li>• Specifications for process effluent tank and FOG reception pits</li> <li>• Confirmation of location of sewer discharge point</li> <li>• Description of bund water management and surface water management.</li> </ul>	26/07/16
Response to Schedule 5 Notice dated 12/08/16	<ul style="list-style-type: none"> <li>• Responses to questions 8, 9, 11, 15, 18, 19 &amp; 20 and Odour Management Plan rev00 dated Aug16 concerning management to minimise odour.</li> <li>• Procedure for Waste Pre-acceptance and Technical assessment v01 dated 16/05/2016 in response to questions 21, 22 &amp; 23 on waste pre-acceptance and acceptance.</li> </ul>	30/08/16

Table S1.2 Operating techniques		
Description	Parts	Date Received
	<ul style="list-style-type: none"> <li>• Procedure for Acceptance of Waste for Treatment v1 dated 12/06/2016 in response to questions 21, 22 &amp; 23 on waste pre-acceptance and acceptance.</li> <li>• Response to question 21 on laboratory quality assurance and quality control.</li> <li>• Response to question 25: Tank list.</li> <li>• Response to question 26: Accident Management Plan issue 001 dated August 2016.</li> </ul>	

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The operator shall submit a proposal to the Environment Agency for approval detailing the method to be used to demonstrate the ground beneath the base of the swales is of sufficiently low permeability to promote surface water collection and not act as a soakaway. The proposal shall include a timescale to undertake the permeability testing and to produce a report to demonstrate the permeability is appropriate. On receipt of written agreement by the Environment Agency to the proposal, the operator shall carry out permeability testing and submit a report to the Environment Agency within two months of the agreed timescale to complete the permeability testing.	18/12/16
IC2	The operator shall compile a list of environmentally critical infrastructure, plant and instrumentation, including preventative maintenance scheduling. The operator shall notify the Environment Agency in writing when the list is available for inspection.	18/01/17
IC3	The operator shall update the Application Site Condition Report to include details of the substances to be stored on site, underground tanks, drainage system (supplied during the determination process), validation remediation report and output from IC2 and submit to the Environment Agency for approval. As part of this update, the operator shall review the need for baseline reference data in line with the requirements of the Industrial Emissions Directive, notably the European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions (Ref. 2014/C 136/03).	18/01/17
IC4	The operator shall fully implement the proposed Environmental Management System and notify the Environment Agency in writing when it is available for inspection.	18/01/17
IC5	The operator shall undertake and report to the Environment Agency the outcome of an assessment of the efficacy of the odour control system to confirm whether hydrogen sulphide (H <sub>2</sub> S) is effectively removed by the wet scrubbing unit. The assessment shall consider whether additional dosing of the scrubber liquor with sodium hydroxide (NaOH) is required in order to minimise emissions of H <sub>2</sub> S using Best Available Techniques.	18/04/17
IC6	The operator shall undertake and report to the Environment Agency the outcome of a night-time noise survey once the installation reaches full load, to confirm compliance with the noise limits specified in the application.	18/10/17
IC7	The operator shall undertake air emissions monitoring from emission points A1 and A2 in accordance with that proposed in the application and submit a report to the Environment Agency detailing the results, to validate the combustion gas concentrations used in the air quality assessment included in the application.	18/10/17

<b>Table S1.4 Pre-operational measures</b>	
<b>Reference</b>	<b>Pre-operational measures</b>
1	Prior to undertaking any activities on the site, the operator shall install penstock valves at the entrance to Swales A, B & C in accordance with the Drainage Layout drawing No. AA4457/EW/03 Rev CC, as confirmed in the email dated 16/09/16. The operator shall supply written confirmation, including an as-built Drainage Layout drawing to the Environment Agency following installation of the penstocks. The operator shall not commence activities until they have written approval from the Environment Agency following receipt of the information above.
2	Prior to undertaking any activities on the site, the operator shall develop a procedure detailing the proposed testing and analysis to be completed on liquids captured in the drainage system in the event of a spill. The operator shall supply a copy of this procedure to the Environment Agency. The operator shall not commence activities until they have written approval from the Environment Agency following receipt of the information above.

## 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 for processing prior to esterification	
<b>Maximum quantity</b>	Up to 26,000 tonnes/year tallow and 90,000 tonnes/year vegetable oil and edible oil and fat. Total waste accepted shall not exceed 116,000 tonnes/year.
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 99	Rendered animal fat (tallow)
<b>02 03</b>	<b>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</b>
02 03 04	Vegetable oil
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 25	Edible oil and fat

## Schedule 3 – Emissions and monitoring

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	No parameter set	No limit set	-	-	-
A2 [Point A2 on site plan in schedule 7]	Thermal Oil Heater	No parameter set	No limit set	-	-	-
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	-	-	-

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	No parameters set	No limit set			
W2 on site plan in schedule 7 emission to unnamed surface water ditch	Uncontaminated surface water	No parameters set	No limit set			

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 Essar foul drainage system	Site effluent treatment plant	Flow	28 m <sup>3</sup> /hour and 672 m <sup>3</sup> /day	-	Continuous	MCERTS self-monitoring of effluent flow scheme



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

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
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.

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to sewer Parameters as required by condition 3.5.1	S1	Every 12 months	1 January

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Esterified oil	tonnes
Glycerine	tonnes

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

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Sewer	Form Sewer1 or other form as agreed in writing by the Environment Agency	18/10/16
Water usage	Form WaterUsage1 or other form as agreed in writing by the Environment Agency	18/10/16
Energy usage	Form Energy1 or other form as agreed in writing by the Environment Agency	18/10/16
Other performance indicators	Form Performance1 or other form as agreed in writing by the Environment Agency	18/10/16
Waste Returns	E-waste Returns Form	-

## 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	

<b>(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</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
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 Directive 2008/98/EC of the European Parliament and of the Council on waste.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 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.

“FOGs” means fats, oils and greases.

“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

“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.

“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

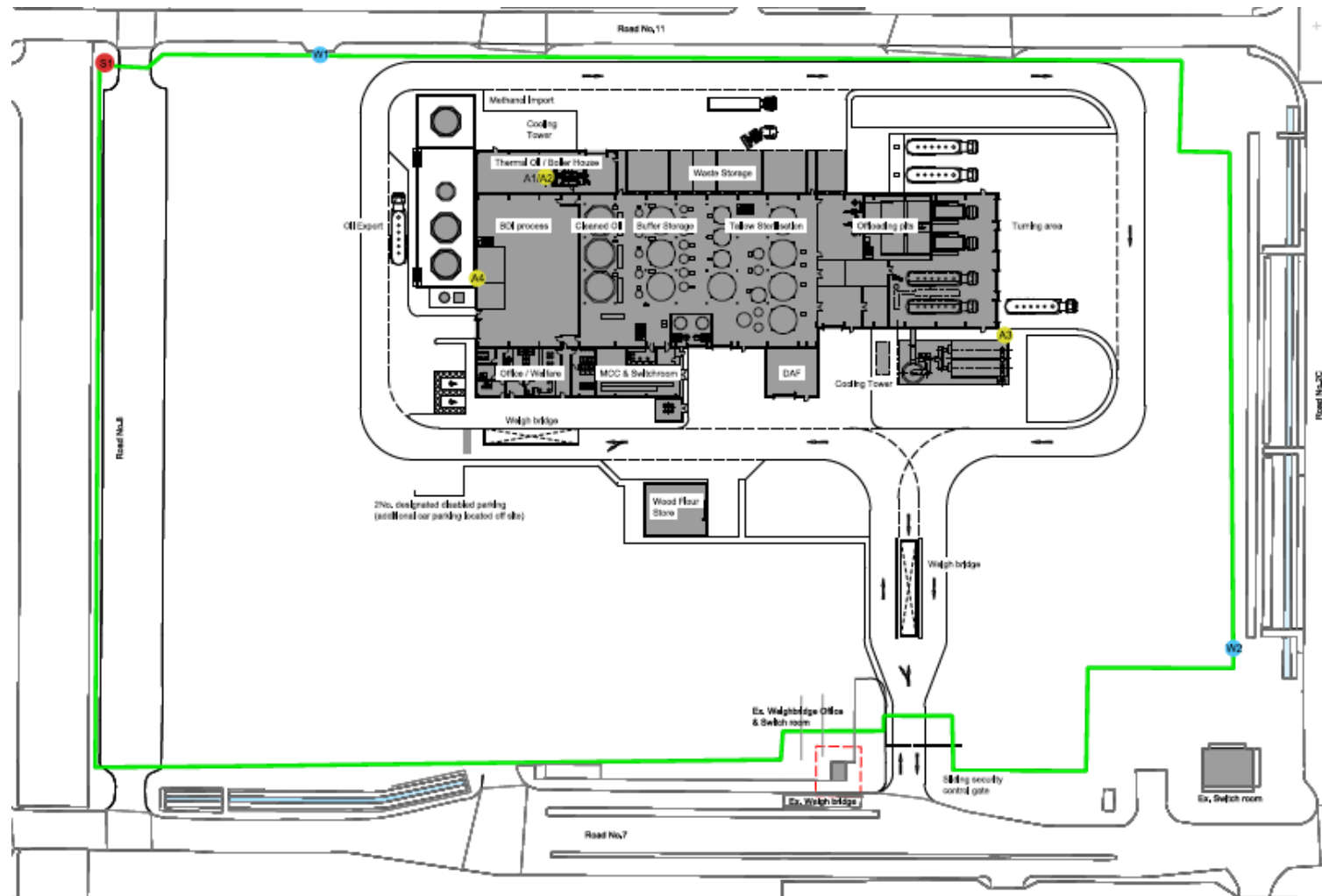
“year” means calendar year ending 31 December.

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: Sewer1/18/10/16**

**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 <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
S1	Flow	28 m <sup>3</sup> /hour and 672 m <sup>3</sup> /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.



5. 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: WaterUsage1/18/10/16**

**Reporting of Water Usage for the year YYYY**

<b>Water Source</b>	<b>Usage (m<sup>3</sup>/year)</b>	<b>Specific Usage (m<sup>3</sup>/unit output)</b>
Mains water		
<b>TOTAL WATER USAGE</b>		

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:** Energy1/18/10/16

**Reporting of Energy Usage for the year YYYY**

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Refinery Gas	MWh		
Diesel	tonnes		
<b>TOTAL</b>	-		

\* Conversion factor for delivered electricity to primary energy = 2.4

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:** Performance1/18/10/16

**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)