

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

British Salt Limited

British Salt Combustion Plant
Cledford Lane
Middlewich
Cheshire
CW10 0JP

Variation application number

EPR/FP3034XD/V002

Permit number

EPR/FP3034XD

British Salt Combustion Plant

Permit number EPR/FP3034XD

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (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.

A non-technical description of the installation is given in the application, but the main features of the installation are as follows.

The site is located at National Grid Reference SJ37163644 on Cledford Lane in Middlewich. The permit refers to a small part of the salt manufacturing site and is limited to the combustion plant and associated fuel storage areas (hereafter known as the installation). The purpose of the installation is to produce steam which is used to indirectly heat a multi-effect evaporation plant on the British Salt site which is outside the scope of this permit. The steam is also used to drive a small back pressure turbine which produces electricity for equipment on the British Salt site.

The installation is bordered by industrial works to the north, beyond which are settling beds. Residential properties border the installation to the north-west, whilst green-field land is to the east and west. A caravan park and cottages are to the south. The Sandbach Flashes SSSI is located 750 m from the installation. The Oakmere and West Midland Mosses habitats sites are located 7.5 km and 12.2 km respectively from the installation.

The installation comprises four boilers. The LCP part of the installation comprises the three primary boilers which were commissioned in 1969 to run on heavy fuel oil. These have subsequently been modified to run on natural gas with gasoil burning capability for occasions when the natural gas supply is interrupted. After conversion, the three original net rated thermal input capacity 35 MWth specification boilers were down-rated to 27.5 MWth, totalling 82.5 MWth for the complete LCP. The three 27.5 MWth boilers are each served by 67.5 m flues contained within a single windshield. The fourth smaller 14 MWth boiler is served by a 28.5 m stack located separately from the multiflue windshield and is therefore not considered to be part of the LCP. All water used in the installation is sourced from condensate return from the evaporation process at the salt manufacturing facility. Cooling in the boiler system is by the supply of water from cooling towers located elsewhere on the site and not part of this permit.

Emissions to air from the installation solely consist of products of combustion and are considered to be environmentally insignificant. There are no emissions to water or sewer. All rainwater falling on the installation together with the small volume of process water is discharged to the British Salt Brinefields some 3 km from the installation. There are no direct releases to land within the installation boundary.

In December 2000 the operator entered into a Climate Change Levy Agreement (CCLA), through the Chemicals Industry Association with the UK Government. The installation also participates in the EU Emissions Trading Scheme (EU ETS).

The operator has an environmental management system, developed using the Chemical Industries Association's Responsible Care Management System guidance but not certified to ISO 14001.

Purpose of variation EPR/FP3034XD/V002

Schedule 1 of the notice specifies that all the conditions of the permit have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made and contains all conditions relevant to this permit.

The requirements of the Industrial Emissions Directive (IED) 2010/75/EU are given force in England through the Environmental Permitting (England and Wales) Regulations 2010 (the EPR) (as amended).

This Permit, for the operation of large combustion plant (LCP), as defined by articles 28 and 29 of the Industrial Emissions Directive (IED), is varied by the Environment Agency to implement the special provisions for LCP given in the IED, by the 1 January 2016 (Article 82(3)). The IED makes special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V.

As well as implementing Chapter III of IED, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issued. It also modernises all conditions to reflect the conditions contained in our current generic permit template.

The Operator has chosen to operate this LCP under the Transitional National Plan (TNP) compliance route. For the parameters specified under the TNP the Operator is required to achieve IED standards by no later than June 2020. This is a change from the previous operating regime which was operation under emission limits determined by an assessment of the best available techniques (BAT).

The schedules specify the changes made to the permit.

The variation notice uses an updated LCP number in accordance with the most recent Defra LCP reference numbers. The LCP reference has changed as follows:

LCP104 is changed to LCP32.

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 BS5134IF	Duly made 13/03/06	
Permit determined	15/12/06	
Full transfer application FP3034XD	Duly made 01/02/08	
Full transfer determined	19/05/08	
Regulation 60 Notice sent to the Operator	09/12/14	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency Initiated review and variation to vary the permit under IED to implement the special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V. The permit is also updated to modern conditions.
Regulation 60 Notice response	20/03/15	Response received from the Operator.
Additional information received	27/05/15	Response to request for further information (RFI) dated 13/05/15.
Variation determined EPR/FP3034XD/V002 (PAS Billing ref: SP3138AD)	18/12/15	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/FP3034XD

Issued to

British Salt Limited ("the operator")

whose registered office is

**Mond House
Winnington
Northwich
Cheshire
CW8 4DT**

company registration number **6398227**

to operate a regulated facility at

**British Salt Combustion Plant
Cledford Lane
Middlewich
Cheshire
CW10 0JP**

to the extent set out in the schedules.

The notice shall take effect from 01/01/2016

Name	Date
Mike Jenkins	18 December 2015

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 2010

Permit number

EPR/FP3034XD

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/FP3034XD/V002 authorising,

British Salt Limited (“the operator”),

whose registered office is

**Mond House
Winnington
Northwich
Cheshire
CW8 4DT**

company registration number **6398227**

to operate an installation at

**British Salt Combustion Plant
Cledford Lane
Middlewich
Cheshire
CW10 0JP**

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

Name	Date
Mike Jenkins	18 December 2015

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) take appropriate measures to ensure the efficiency of energy generation at the permitted installation is maximised;
- (c) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (d) 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;
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

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

2 Operations

2.1 Permitted activities

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

2.2 The site

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

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 For the following activity referenced in schedule 1 Table S1.1: LCP32; without prejudice to condition 2.3.1, the activity shall be operated in accordance with the “Electricity Supply Industry IED Compliance Protocol for Utility Boilers and Gas Turbines” revision 1 dated February 2015 or any later version unless otherwise agreed in writing by the Environment Agency.

2.3.3 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.4 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.5 For the following activities referenced in schedule 1, table S1.1: LCP32. Standby fuel, Gas Oil, may be used for periods of up to 10 days during times of interruption to the gas supply.

2.3.6 For the following activities referenced in schedule 1, table S1.1: LCP32. The end of the start up period and the start of the shutdown period shall conform to the specifications set out in Schedule 1, tables S1.2 and S1.4.

2.3.7 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.

2.3.8 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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Total annual emissions from the LCP emission points set out in schedule 3 table S3.1 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.
- 3.1.4 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.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 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 table S3.1.
- 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 continuous), 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 table S3.1 unless otherwise agreed in writing by the Environment Agency.

3.6 Monitoring for the purposes of the Industrial Emissions Directive Chapter III

- 3.6.1 For the following activities referenced in schedule 1, table S1.1: LCP32: All monitoring required by this permit shall be carried out in accordance with the provisions of Annex V of the Industrial Emissions Directive.
- 3.6.2 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with 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;
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule;
- (d) where condition 2.3.5 applies, the start date and time, and the days and hours of operation for each period of standby fuel operation.

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 For the following activities referenced in schedule 1, table S1.1: LCP32. Unless otherwise agreed in writing with the Environment Agency, within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form IED RTA1, listed in table S4.4, the information specified on the form relating to the site's mass emissions.

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 condition 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 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:

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

4.3.5 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.

4.3.8 The operator shall inform the Environment Agency in writing of the closure of any LCP within 28 days of the date of closure.

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 listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
Section 1.1 A(1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.	LCP32: Babcock and Wilcox boilers #1, #2 and #3 for the production of steam. Total net rated thermal input of 82.5 MWth. Non-LCP: John Thompson boiler #4 for production of steam. 14 MWth net rated thermal input.	From receipt of raw materials to despatch of products and waste including emissions to air of combustion gases. Natural gas is used as the primary fuel for the boilers with gas oil only used during periods of natural gas supply failure, or for the purpose of testing.
Directly Associated Activity		
Directly associated activity	Boiler feed-water treatment	From receipt and storage of raw materials to the despatch of effluent to the British Salt Brinefields lagoon system
Directly associated activity	Steam turbine	From introduction of steam to generation of electricity for use on site.
Directly associated activity	Oil storage	From receipt of raw materials to despatch for use.
Directly associated activity	Surface water drainage	Handling and storage of site drainage until discharge to the British Salt Brinefields lagoon system

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to section 2.1 and 2.2 in the application	13/03/06
Full transfer application	The response to Parts A, D and F in the application	01/02/08
Response to regulation 60(1) Notice – request for information dated 09/12/14	Compliance routes and operating techniques identified in response to questions 146 (compliance route), 148 (boiler configuration), 149 (net rated thermal input), 150 (MSUL/MSDL), 151 (proposed ELVs), 153 (monitoring requirements).	20/03/15
Receipt of additional information to the regulation 60(1) Notice. requested by email dated 13/05/15	Compliance route and operating techniques identified in response to questions 6 (MSUL/MSDL) and 7 (proposed ELVs).	27/05/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	For LCPD LCP104 (now LCP32 under IED). Annual emissions of dust, sulphur dioxide and oxides of nitrogen including energy usage for the year 01/01/2015 to 31/12/2015 shall be submitted to the Environment Agency using form AAE1 via the NERP Registry. If the LCPD LCP was a NERP plant the final quarter submissions shall be provided on the RTA 1 form to the NERP Registry.	28/01/16
IC2	The Operator shall install access points for each of the stacks A1, A2, and A3 to enable the measuring of stack gas volume flow in accordance with BS EN 16911 & TGN M2.	30/06/16

Table S1.4 Start-up and Shut-down thresholds		
Emission Point and Unit Reference	“Minimum start up load” Steam flow rate (lb/h) and percent of rated thermal output (%); and discrete processes	“Minimum shut-down load” Steam flow rate (lb/h) and percent of rated thermal output (%); and discrete processes
LCP32: A1 , A2, A3	10,000 lb/h; 15.4%	10,000 lb/h; 15.4%
LCP32: A1 , A2, A3	Boiler operating pressure >605 psig; and Feed water flow commenced; and Gas firing rate per burner (top and bottom) >10000 ft ³ /h	Switch from auto to manual control; and Gas firing rate per burner (top and bottom) <10000 ft ³ /h; and Boiler operating pressure <605 psig

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Gas oil	Not exceeding 0.1% w/w sulphur content

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air natural gas fired boilers ≥50 <100MWth operating under the Transitional National Plan

Emission point ref.	Source	Parameter	Limit (Notes [1], [2], [3])	Reference period	Monitoring frequency	Monitoring standard or method	
A1, A2, A3, A4 [as shown on site plan in schedule 7]	LCP32 Boiler plant (for A1, A2, A3) and 14 MWth John Thompson boiler (for A4)	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	140 mg/m ³	---	At least every 6 months	BS EN 14792	
		Carbon Monoxide	110 mg/m ³	---		BS EN 15058	
		Sulphur dioxide	35 mg/m ³ [4]	---	At least every 6 months	Concentration by calculation, as agreed in writing with the Environment Agency	
		Dust	5 mg/m ³ [4]	---			
		Oxygen	---	---			Periodic As appropriate to reference
		Water Vapour					BS EN 14790
		Stack gas volume flow	---	---	As specified in TGN M2	BS EN 16911 & TGN M2	
		As required by the Method Implementation Document for BS EN 15259	---	---	Pre-operation and when there is a significant operational change	BS EN 15259	

Note [1]: limits do not apply during start up or shut down.

Note [2]: limits do not apply when standby fuel is used in accordance with condition 2.3.5.

Note [3]: limits apply for the LCP (A1, A2 and A3 in combination) as a whole and A4 separately.

Note [4]: SO₂ and dust limits do not apply to emission point A4.

Note [5]: Stack gas volume flow measurement is not required for emission point A4.

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit	Reference period	Monitoring frequency	Monitoring standard or method
S1 on site plan in Schedule 7 emission to Brinefield	---	Surface water, boiler blowdown and pump seal water.	---	---	---	Permanent sampling access not required

Table S3.3 Annual limits to air (Excluding start up and shut down)			
Substance	Limit		Emission Points
Oxides of Nitrogen to Air	Assessment year	LCP TNP Limit	LCP32 Windshield for emission points A1, A2 and A3
	01/01/16 and subsequent years until 31/12/19 and 01/06/20-30/06/20	Emission allowance figure shown in the TNP Register as at 30 April the following year	

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
Oxides of nitrogen	A1, A2, A3, A4	Every 6 months	1 January, 1 July.
Carbon Monoxide	A1, A2, A3, A4	Every 6 months	1 January, 1 July.
Sulphur dioxide	A1, A2, A3	Every 6 months	1 January, 1 July.
Dust	A1, A2, A3	Every 6 months	1 January, 1 July.

Table S4.2: Annual production/treatment		
Parameter	Frequency of assessment	Units
Steam generated	Annually	tonnes and TJ
Electricity generated	Annually	TJ

Table S4.3: Chapter III Performance parameters for reporting to DEFRA and other Performance parameters		
Parameter	Frequency of assessment	Units
Thermal Input Capacity for each LCP	Annually	MW
Annual Fuel Usage for each LCP [1]	Annually	TJ
Total Emissions to Air of NO _x for each LCP	Annually	t
Total Emissions to Air of SO ₂ for each LCP	Annually	t
Total Emissions to Air of Dust for each LCP	Annually	t
Operating Hours for each LCP	Annually	h
Natural gas energy consumption	Annually	TJ
Gasoil energy consumption	Annually	TJ
Specific energy usage [2]	Annually	Net MWh energy consumed / tonne steam produced

Note [1]:

[Annual Fuel Usage for each LCP] = [Natural gas energy consumption] + [Gasoil energy consumption]

Note [2]:

[Specific energy usage] = { [Annual Fuel Usage for each LCP] – [Electricity generated] } / [Steam generated]

Table S4.4 Reporting forms				
Media/ parameter	Reporting format	Starting Point	Agency recipient	Date of form
Air & Energy [1]	Form IED AR1 – SO ₂ , NO _x and dust mass emission and energy (for LCP emissions)	01/01/16	National	31/12/15
Air [1]	Form IED RTA1 – TNP quarterly emissions summary log (for LCP emissions)	01/01/16	National	31/12/15
LCP [1]	Form IED HR1 – operating hours (for LCP)	01/01/16	National	31/12/15
Air [1]	Form IED PM1 – discontinuous monitoring and load. (for LCP emissions)	01/01/16	Area Office	31/12/15
Other performance indicators [2]	Form Energy 1 or other form as agreed in writing by the Environment Agency	01/01/16	Area Office	25/03/08
Air [2]	Form Air 1 or other form as agreed in writing by the Environment Agency (for boiler 4 emissions)	01/01/16	Area Office	25/03/08

Note [1]: Forms relating to LCP operation; these are standardised forms and not all parameters listed may be applicable to this permit.

Note [2]: Forms relating to non-LCP or whole installation operation.

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

Parameter	Notification period

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

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

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

“background concentration” means such concentration of that substance as is present in:

1. for emissions to surface water, the surface water quality up-gradient of the site; or
2. for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“calendar monthly mean” means the value across a calendar month of all validated hourly means.

“CEN” means Comité Européen de Normalisation.

“Energy efficiency” the annual net plant energy efficiency means the value calculated from the operational data collected over the year.

“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 or background concentration limit.

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

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

“large combustion plant” or “LCP” is a combustion plant or group of combustion plants discharging waste gases through a common windshield or stack, where the total thermal input is 50 MW or more, based on net calorific value. The calculation of thermal input, excludes individual combustion plants with a rated thermal input below 15MW.

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

“MSDL” means minimum shut-down load as defined in Implementing Decision 2012/249/EU.

“MSUL” means minimum start-up load as defined in Implementing Decision 2012/249/EU.

“Natural gas” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

“operational hours” are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

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

“SI” means site inspector.

“Standby fuel” means alternative liquid fuels that are used in emergency situations when the gas fuel which is normally used, is not available.

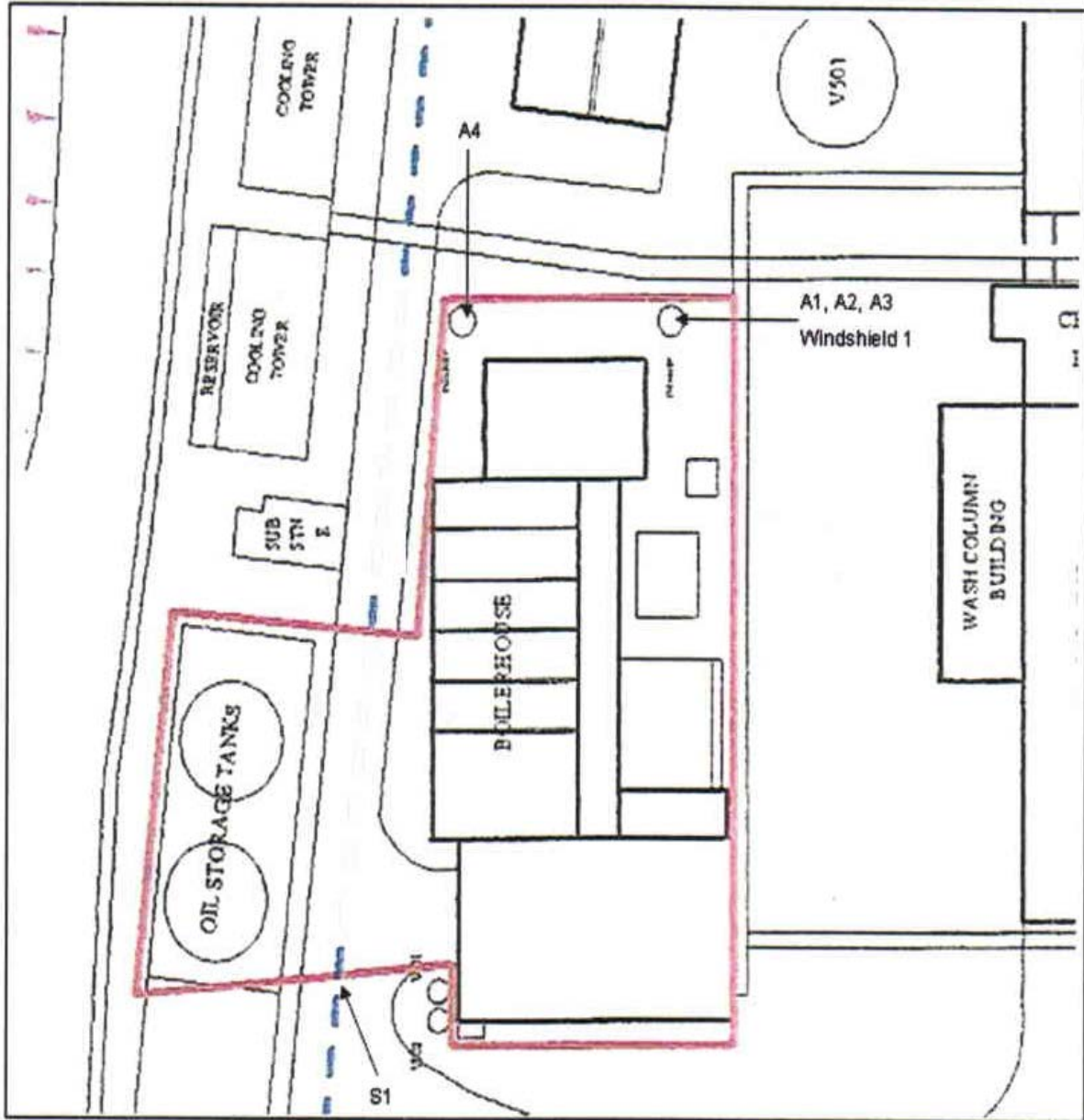
“TNP Register” means the register maintained by the Environment Agency in accordance with regulation 4 of the Large Combustion Plants (Transitional National Plan) Regulations 2015 SI2015 No.1973.

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

1. in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273.15 K, 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;

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT