Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

BAE Systems Surface Ships Limited

HMNB Portsmouth
HM Naval Base
Portsmouth
Hampshire
PO1 3NH

Variation application number

EPR/MP3035FF/V002

Permit number

EPR/MP3035FF

HMNB Portsmouth
Permit number EPR/MP3035FF

Introductory note

This introductory note does not form a part of the notice

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

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

The following changes are proposed as part of this variation:

The existing boiler located in the West Boiler House has now been decommissioned. It will be replaced with three new 9.8MWth Combined Heat and Power (CHP) units which are to be located in the Central Boiler House. The four other existing boilers located at the Central Boiler House and the Eastern Boiler House will not change as part of this variation. The total thermal input of all boilers and CHP units at the installation will now be 85.4MW.

The rest of the installation is unchanged and continues to be operated as follows:

The installation's centre is located at NGR SU628003 and consists of three boiler house units (Central, West and East) within the larger Portsmouth Naval Harbour complex. The combustion plant within these boiler houses comprise four boilers and three CHP units, which feed into a common steam mains pipe to supply building units within this complex.

The installation has nine release points to air from the combustion plant, as outlined below and one release to surface water from within the eastern boiler house installation boundary, while surface water drainage from the central boiler house enters the surface water drainage system outside the installation boundary. The installation also has three releases to sewer, one from the East boiler house and two from the Central boiler house.

Central boiler house

This location houses two 21MWth boilers, fired on natural gas, with the ability to operate on gas oil in the event of interruption of natural gas supply. Both boilers have twin exhaust flues contained within a common stack and are fitted with low oxides of nitrogen, dual fuel burners. They are typically operated with one as the duty boiler and the other as a standby boiler. This boiler house also houses three 9.8MWth CHP units which are fired on natural gas. The CHP units discharge via a common stack, and are lean burn spark ignition engines. This part of the installation includes the storage of gas oil, water treatment chemicals and a reverse osmosis water treatment unit.

East boiler house

This location houses two 7MWth boilers, fired on natural gas, with the ability to operate on gas oil in the event of the interruption of natural gas supply. Both boilers have separate stacks and are fitted with low oxides of nitrogen, dual fuel burners. This part of the installation includes the storage of gas oil, boiler water treatment chemicals (acid and brine) and a chemical water treatment unit.

The installation has previously been regulated under an IPC authorisation and is covered by an EU Emissions Trading Scheme permit.

There are 2 Special Areas of Conservation (SACs), 4 Special Protection Areas (SPAs) and 3 Ramsar sites within 10km of the installation. There is 1 Site of Special Scientific Interest (SSSI) within 5km of the installation. There are also 4 Local Wildlife Sites (LWSs) within 2km of the installation.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	**Date**	**Comments**
Application XP3338SQ	Duly made 22/05/06	
Request for further information	27/06/06	
Permit determined	30/01/07	
Variation EPR/XP3338SQ/V002	07/12/09	
Application EPR/MP3035FF/T001 (full transfer of permit EPR/XP3338SQ)	Duly made 17/06/11	Application to transfer the permit in full to BAE Systems Surface Ships Limited.
Transfer determined EPR/MP3035FF	06/10/11	Full transfer of permit complete.
Application EPR/MP3035FF/V002 (variation and consolidation)	Duly made 05/09/18	Application to vary the permit to remove one boiler, add three CHP units and consolidate the permit.
Additional information received	26/02/19	Received revised modelling, BAT assessment, site plans and operating techniques.
Additional information received	06/03/19	Received modelling input files.
Additional information received	16/05/19	Received cost benefit assessment.
Additional information received	28/06/19	Received revised modelling and input files.
Additional information received	24/09/19	Received revised site plans.
Variation determined EPR/MP3035FF PAS Billing ref. BP3330QG	25/10/19	Varied permit issued.

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/MP3035FF

Issued to

BAE Systems Surface Ships Limited ("the operator")

whose registered office is

Warwick House
PO BOX 87
Farnborough Aerospace Centre
Farnborough
Hampshire
GU14 6YU
company registration number 06160534

to operate a regulated facility at

HMNB Portsmouth
HM Naval Base
Portsmouth
Hampshire
PO1 3NH

to the extent set out in the schedules.

The notice shall take effect from 25/10/2019

Name	Date
David Griffiths	**25/10/2019**

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/MP3035FF

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/MP3035FF/V002 authorising,

BAE Systems Surface Ships Limited ("the operator"),

whose registered office is

Warwick House
PO BOX 87
Farnborough Aerospace Centre
Farnborough
Hampshire
GU14 6YU
company registration number 06160534

to operate an installation at

HMNB Portsmouth
HM Naval Base
Portsmouth
Hampshire
PO1 3NH

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

Name	Date
David Griffiths	**25/10/2019**

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.

1.2.2 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:

(a) new plans for significant developments within 15 km of the installation;

(b) changes to the Local Plan;

(c) changes to the DECC UK CHP Development Map or similar; and

(d) new financial or fiscal incentives for CHP.

The results shall be reported to the Agency within 2 months of each review, including where there has been no change to the original assessment in respect of the above factors.

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 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 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.

2.3.5 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.

2.3.6 Standby gas oil fuel may be used in a maximum of three boilers at any one time, (one boiler from each of the three boiler houses), and for no more than 500 hours per boiler per year.

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 Where a substance is specified in schedule 3 table S3.2 or S3.3 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

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 tables S3.1, S3.2 and S3.3; and

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.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production/treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 In the event:

(a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform the Environment Agency;

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident; and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) of a breach of any permit condition the operator must immediately—

(i) inform the Environment Agency; and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (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 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.

4.4 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**	**Limits of specified activity**
AR1	Section 1.1 A(1) (a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.	Two 21 MWth gas fired boilers Two 7 MWth gas fired boilers Three 9.8 MWth CHP gas fired spark ignition engines	From receipt of fuel (natural gas with gas oil standby fuel) and other raw materials through to discharge of exhaust gases and the generation of electricity and where applicable heat.
Directly Associated Activity			
AR2	Directly associated activity	Water treatment	From receipt of raw materials to dispatch to chemical effluent and dirty water system.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/MP3035FF/A001	The response to section 2.1 and 2.2 in the Application.	29/03/06
Response to further information request dated 27/06/06	Responses to question 3 detailing primary techniques used to prevent pollution.	03/09/06
Application EPR/MP3035FF/V002	The response to Part C2 section 2, Part C3 section 3 and the document titled “Environmental Application Permit Amendment v4”.	23/08/18
Response to Schedule 5 issued 18/12/18	Response to Schedule 5 including document titled ‘Environmental Application Appendix v1.1’ sections 1.1.5, 1.1.7 and 1.1.9.	26/02/19

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The Operator shall incorporate the following items within the environmental management system, to address the requirements set out in Section 2.3 of the Agency Guidance Note IPPC S2.03: • A defined procedure for identifying, reviewing and prioritising items of plant for which a preventative maintenance regime is appropriate; • Training needs assessment which: o Identifies all posts for which specific environmental awareness training is required; o Identifies the scope and level to which such training is to be given; • Training systems for all relevant staff that covers the: o likely potential environmental impacts which may be caused by plant under their control, covering both normal and abnormal circumstances; • includes contractors and those responsible for liaising with contractors and those purchasing equipment and materials; • Written procedures for handling, investigating, communicating and reporting actual or potential non-compliance with operating procedures or emission limits; • Procedures that incorporate environmental issues on the control of process change on the installation; and • Audits, at least annually, to check that all activities are being carried out in conformity with the environmental requirements. Upon completion, a summary report of the system incorporated shall be provided to the Agency. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.	01/08/07
IC2	The Operator shall upgrade the following areas of hardstanding and bunding, to address the requirements of Sector Guidance Note S2.03, section 2.2.9: • Central, eastern and western boiler house gas oil tank fill points; • Eastern boiler house saline tank bunding; and • Cracks in western boiler house gas oil storage tank bund. Notwithstanding the requirements of condition 2.8.2 of this permit, the operator shall update the Site Protection and Monitoring Programme submitted in accordance with condition 2.8.1 to include procedures for ensuring that the above hardstanding and bunding 01/08/07 Permit Number XP3338SQ Page 12 Date of Issue: 30/01/07 Table S1.3 Improvement programme requirements standards are maintained throughout the subsistence of this permit.	01/08/07

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC3	The Operator shall prepare a written Accident Management Plan with regard to the requirements set out in Section 2.8 of the Agency Guidance Note IPPC S2.03 such that fire, explosion and flood risks are adequately addressed. Upon completion, a copy of the Accident Management Plan shall be submitted to the Agency for approval. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan. The plan shall be implemented by the operator from the date of approval by the Agency.	01/11/07
IC4	A report shall be submitted to the Agency for approval detailing the results of a review of raw materials and water audit, in accordance with the requirements set out in Section 2.4 of the Agency Guidance Note IPPC S2.03. The report shall detail the findings of the audit and timescales for any proposed improvements. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The proposed improvements shall be implemented by the operator from the date of approval by the Agency.	01/02/08
IC5	The operator shall submit to the Environment Agency for approval a plan for use of waste heat identified in the cost benefit analysis (dated 16/05/2019) in the summer and spring months. The plan shall include as a minimum: • A timescale for implementation; • A description of any dependencies or further approvals required; • A description of any changes that will need to be made to the plant; • Whether there will be any operational changes which could affect the environmental impact of the installation; and • Consideration of whether a permit variation will be required. If required to do so by the Environment Agency they shall implement the plan in accordance with the Environment Agency's written approval.	01/03/20

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						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)- these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [Point A1 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Combustion exhaust gases from Boiler 1 (21MWth) via Central boiler house common stack	140 mg/m^3 when firing on natural gas, 300 mg/m^3 when firing on gas oil	-	Annual monitoring event triggered should the total boiler operating load exceed 8MW in that year	BS EN 14792 and to a monitoring plan that has been previously agreed in writing by the Agency. Permanent sampling access not required
A2 [Point A2 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO2 expressed as NO2	Combustion exhaust gases from Central Boiler 1 (21MWth) via central boiler house common stack	140 mg/m^3 when firing on natural gas, 300 mg/m^3 when firing on gas oil	-	Annual monitoring event triggered should the total boiler operating load exceed 8MW in that year	BS EN 14792 and to a monitoring plan that has been previously agreed in writing by the Agency. Permanent sampling access not required

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)- these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A3 [Point A3 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO2 expressed as NO2	Combustion exhaust gases from Central Boiler 2 (21MWth) via central boiler house common stack	140 mg/m^3 when firing on natural gas, 300 mg/m^3 when firing on gas oil	-	Annual monitoring event triggered should the total boiler operating load exceed 8MW in that year	BS EN 14792 and to a monitoring plan that has been previously agreed in writing by the Agency. Permanent sampling access not required
A4 [Point A4 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO2 expressed as NO2	Combustion exhaust gases from central Boiler 2 (21MWth) via central boiler house common stack	140 mg/m^3 when firing on natural gas, 300 mg/m^3 when firing on gas oil	-	Annual monitoring event triggered should the total boiler operating load exceed 8MW in that year	BS EN 14792 and to a monitoring plan that has been previously agreed in writing by the Agency. Permanent sampling access not required
A5 [Point A5 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO2 expressed as NO2	Combustion exhaust gases from Eastern Boiler 3 (7MWth) via eastern boiler house stack	140 mg/m^3 when firing on natural gas, 300 mg/m^3 when firing on gas oil	-	Annual monitoring event triggered should the total boiler operating load exceed 8MW in that year	BS EN 14792 and to a monitoring plan that has been previously agreed in writing by the Agency. Permanent sampling access not required

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)- these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A6 [Point A6 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO2 expressed as NO2	Combustion exhaust gases from Boiler 4 (7MWth) via eastern boiler house individual stack	140 mg/m^3 when firing on natural gas, 300 mg/m^3 when firing on gas oil	-	Annual monitoring event triggered should the total boiler operating load exceed 8MW in that year	BS EN 14792 and to a monitoring plan that has been previously agreed in writing by the Agency. Permanent sampling access not required
A8 [Point A8 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Combustion exhaust gases from CHP Engine 1 at eastern boiler house	95 mg/m^3	Periodic (average over one hour)	Annual	MCERTS BS EN 14792 Note 1 Permanent sampling access not required
	Carbon monoxide		No limit set	Periodic (average over one hour)	Annual	MCERTS BS EN 15058 Permanent sampling access not required
A9 [Point A9 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Combustion exhaust gases from new CHP Engine 2 at eastern boiler house	95 mg/m^3	Periodic (average over one hour)	Annual	MCERTS BS EN 14792 Note 1 Permanent sampling access not required

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)- these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
	Carbon monoxide		No limit set	Periodic (average over one hour)	Annual	MCERTS BS EN 15058 Permanent sampling access not required
A10 [Point A10 on site plan in schedule 7]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Combustion exhaust gases from new CHP Engine 3 at eastern boiler house	95 mg/m^3	Periodic (average over one hour)	Annual	MCERTS BS EN 14792 Note 1 Permanent sampling access not required
	Carbon monoxide		No limit set	Periodic (average over one hour)	Annual	MCERTS BS EN 15058 Permanent sampling access not required
Pressure relief valves	No parameters set	All boilers located within central and eastern boiler house	No limit set	-	-	Permanent sampling access not required
Vents from storage tanks	No parameters set	Storage tanks for raw materials for boilers located within central, eastern and western boiler houses	No limit set	-	-	Permanent sampling access not required

Table S3.1 Point source emissions to air						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)- these limits do not apply during start up or shut down.**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
Note 1: Monitoring requirements are defined 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. Note 2: Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O_2 content of 6% for solid fuels, 15% for engines and gas turbines and 3% all other MCPs.						

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
W1 on site plan in schedule 7 emission to Portsmouth Harbour	No parameters set	Surface water	No limit set	-	-	Permanent sampling access not required

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	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1 on site plan in schedule 7 emission to effluent treatment plant	No parameters set	Boiler blowdown	No limit set	-	-	Permanent sampling access not required
S2 on site plan in schedule 7 emission to effluent treatment plant	No parameters set	Boiler blowdown	No limit set	-	-	Permanent sampling access not required
S3 on site plan in schedule 7 emission to effluent treatment plant	No parameters set	Boiler blowdown	No limit set	-	-	Permanent sampling access not required

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, A3, A4, A5, A6, A8, A9 and A10.	Every 12 months	1 January

Table S4.2: Annual production/treatment	
Parameter	**Units**
Steam generated	Tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	m^3
Gas usage	Annually	MJ
Gas oil usage	Annually	MJ
Waste generation	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	25/10/19
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	30/01/07
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	30/01/07

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	

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

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

“base load” means: (i) as a mode of operation, operating for >4000hrs pa; and (ii) as a load, the maximum load under ISO conditions that can be sustained continuously, i.e. maximum continuous rating.

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

“CEN” means Commité Européen de Normalisation.

“Combustion Technical Guidance Note” means IPPC Sector Guidance Note Combustion Activities, version 2.03 dated 27th July 2005 published by Environment Agency.

“Commissioning” means testing of the installation that involves any operation of a Large Combustion Plant referenced in schedule 1, table S1.1.

“DLN” means dry, low NO_x burners.

“emissions to land” includes emissions to groundwater.

“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 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

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

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

“MCR” means maximum continuous rating.

“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.

“ncv” means net calorific value.

“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.

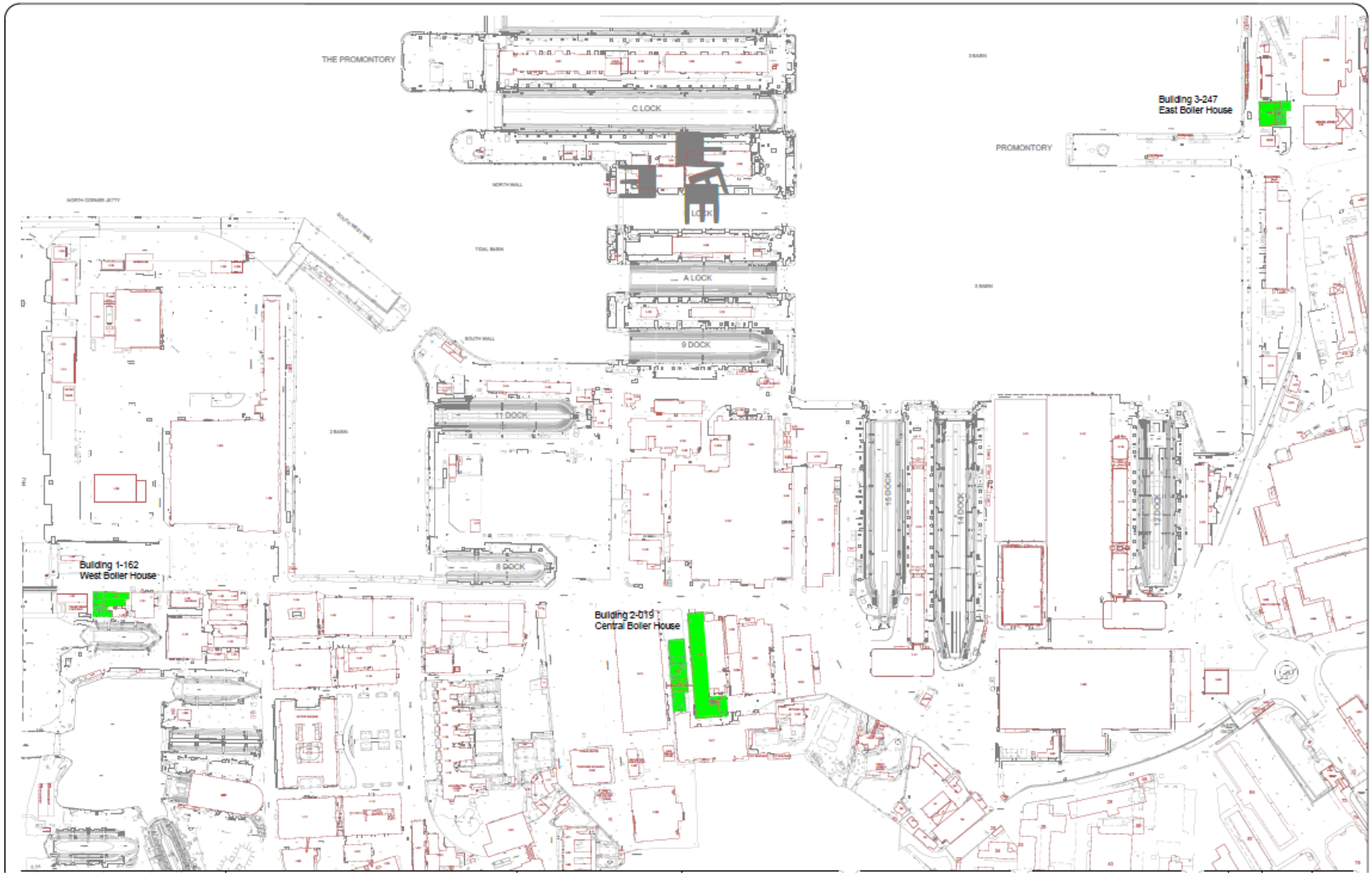
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

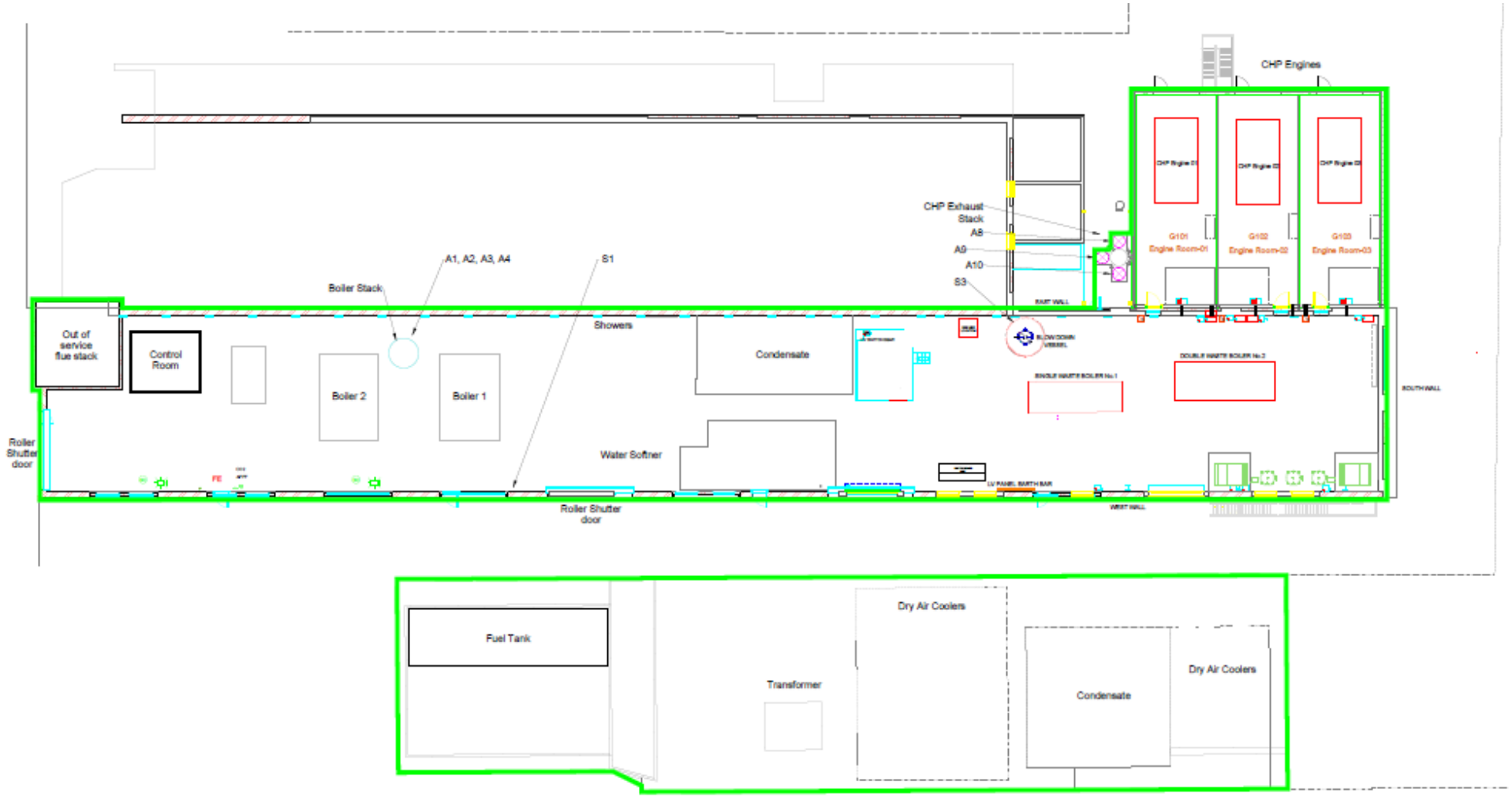
- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from gas turbine or compression ignition engine combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry for liquid and gaseous fuels; and/or
- in relation to emissions from combustion processes comprising a gas turbine with a waste heat boiler, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry, unless the waste heat boiler is operating alone, in which case, with an oxygen content of 3% dry for liquid and gaseous fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December

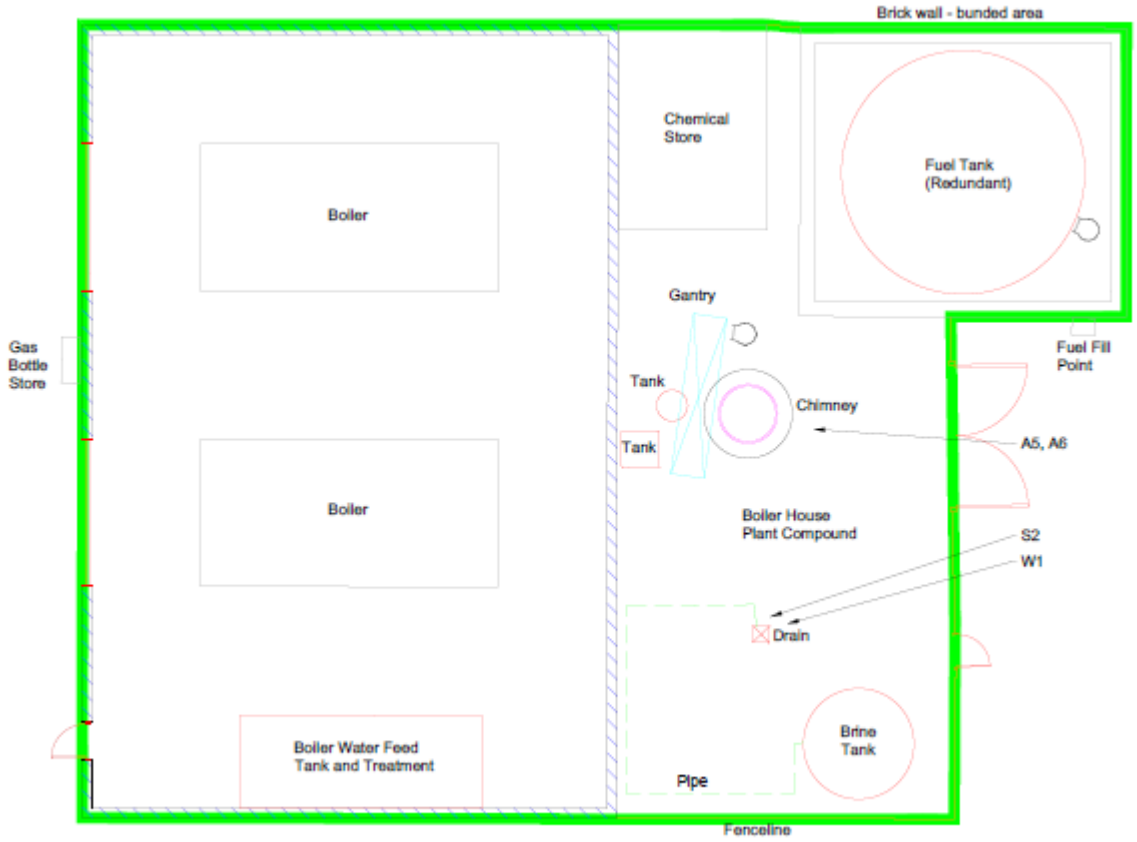
Schedule 7 – Site plan



Central boiler house



Eastern boiler house



END OF PERMIT