Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Campact Limited

Campact
Anick Grange Road
Hexham
Northumberland
NE46 4JS

Variation application number

EPR/BT0359IP/V007

Permit number

EPR/BT0359IP

Campact
Permit number EPR/BT0359IP

Introductory note

This introductory note does not form a part of the notice

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

Changes introduced by this variation notice/statutory review

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

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

Where appropriate, we also considered other relevant BAT Conclusions published prior to this date but not previously included in a permit review for the Installation:-
Common waste water and waste gas treatment/management systems in the chemical sector. Published 09 June 2016

The BAT Conclusions for this installation which apply from 7th December 2021 are:
Production of Large Volume Organic Chemicals:
2, 8-12, 14, 15, 17-19, 45-47.

Common waste water and waste gas treatment/management systems in the chemical sector:
1-5, 7-13, 15, 16, 19.

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

Brief Description of the process

The activities at Campact involve two main process stages: the production of formaldehyde from methanol and the manufacture of polymer resins using blends of formaldehyde, urea, melamine and other additives. The main purpose is to supply resins to manufacture chipboard at Egger UK Limited's sites at Hexham (adjacent) and Barony in Scotland. The relevant listed activities are:

Section 4.1A(1)(a)(ii) – producing organic chemicals such as aldehydes

Section 4.1A(1)(a)(viii) – producing organic chemicals such as polymers

The 'Formox' formaldehyde plant is based on the metal oxide process. The formaldehyde synthesis process is a vapour phase reaction, in which methanol vapour mixes with pre-heated recycled gases and fresh air. This mixture is oxidised over a metal oxide catalyst. The reaction is exothermic and the waste heat is removed by a heat transfer fluid and used to raise steam for resin plant use and any excess waste heat is transferred to the board manufacturing plant. Reacted gases pass into an absorption column where the formaldehyde product is taken up in water. A proportion of off-gases from the column are recycled into the reactor and the remainder are rendered harmless in a catalytic oxidiser (the Emissions Control System

(ECS)), which is fitted with heat recovery. All cooling water is collected and sent to the cooling tower. The plant has a maximum production capacity of 105,000 tonnes of formalin (37%) per annum.

Resin manufacture takes place in three stainless steel batch reactors. Raw materials are charged to the resin reactors and using a combination of heat, pH adjustment, buffer solutions and catalysts, several variations of the resin product are manufactured. Any releases from the reactors into air are abated using a wet scrubber. This plant can produce up to 150,000 tonnes of mixed resin products.

A variation was granted in 2017 to replace two steam raising standby boilers with a single modern Medium Combustion Plant Directive-compliant unit with a thermal input of 11MW and a single 15 metre stack. This supplies back-up heat to the process and buildings when there is insufficient available heat stored in the accumulator recovered from the exothermic process. The boiler runs on natural gas with gas-oil as a back-up in the event of gas supply interruption.

A standby diesel generator provides electricity (500 kW) for essential processes on site during periods of power supply disruptions. Compressed air (instrument air) is provided by two air compressors (55 kW each). Compressed air is also required to feed the nitrogen generator supplying the Formox plant.

The cooling water is provided by two resin evaporative cooling towers and two formaldehyde plant evaporative cooling towers.

Process effluent and rainwater is collected in various containment areas and sumps. Effluent from reactor cleaning is collected in a separation basin to allow settlement of resin residues prior to transfer of the cleaning water into the effluent tank. The precipitates from the separation basin are disposed of as solid waste. If necessary, the pH in the effluent tank is adjusted prior to discharge to sewer, for final treatment at Hexham Sewage Treatment Works (STW). Uncontaminated roof rainwater is discharged to the River Tyne.

Campact Limited operate an Integrated Management System for Health, Safety, Environment and Quality that is certified to ISO 14001 and ISO 9001.

The installation is located on the north bank of the River Tyne, approximately 1 km to the northeast of Hexham town centre. The site is centred on National Grid Reference NY 94605 64546. The North Pennine Moors Special Areas of Conversation (SAC) and Special Protection Area (SPA) is within the 10 km screening distance, as are the Tyne & Allen River Gravels (SAC). Quarry Wood ancient woodland is within the 2km screening distance of the installation.

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 BT0359IP	31/07/03	
Response to request for information	24/11/03	Response received 16/01/04
Permit BT0359IP	25/03/04	Determined
Variation PP3635SE	04/04/05	Rectify typing errors
Variation YP3037MH	07/02/07	Change registered office address
Application received EPR/BT0359IP/V004	Duly made 27/03/13	Application for Variation, Cooling Tower Replacement and extension of site boundary
Additional information received	27/03/13	Confirmation of site boundary
Permit determined EPR/BT0359IP/V004	22/04/13	Varied permit issued
Application EPR/BT0359IP/V005 (variation)	Duly made 26/06/14	Application to vary the permit to include a small extension to the north-east installation boundary, upgrade/replacement of the ageing formaldehyde plant, resin plant and resin storage areas.
Variation determined EPR/BT0359IP	16/09/14	Varied permit issued.
Application EPR/BT0359IP/V006 (variation)	Duly made 10/07/17	Application to vary to replace the two standby boilers with one modern 11MW_{th} input boiler.
Additional information	25/08/17	Confirmation of the aggregate MW_{th} of the old boilers.
Variation determined EPR/BT0359IP (Billing Ref. KP3237YC)	31/08/17	Varied permit issued.
Regulation 61 Notice dated 04/05/18 (Notice requiring information for statutory review of permit)	Response Received 09/08/18	Technical standards detailed in response to the information notice.
EPR/BT0359IP/V007 (variation and consolidation)	Environment Agency Initiated Variation	Statutory review of permit occasioned by LVOC BAT Conclusions published 07 December 2017.
Further information response to request dated 04/09/18	04/10/19	Response to queries on various LVOC and CWW BAT conclusions and the WFD risk assessment.
Further information response to request dated 05/01/21	28/01/21	Response to queries on formaldehyde treatment and LVOC BAT 19.
Further information response to request dated 18/02/21	12/03/21	Response to various queries from drafting the LVOC permit review variation.
Additional information	07/05/21	Location and operation of the thermal oil room.
Variation determined EPR/BT0359IP (Billing Ref: TP3238QE)	12/05/21	Varied and consolidated permit issued including update to registered office address.

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/BT0359IP

Issued to

Campact Limited ("the operator")

whose registered office is

1st Floor Technology House
48 - 54 Goldsworth Road
Woking
GU21 6LE

company registration number 02258069

to operate a regulated facility at

Campact
Anick Grange Road
Hexham
Northumberland
NE46 4JS

to the extent set out in the schedules.

The notice shall take effect from 12/05/2021

Name	Date
Philip Lamb	**12/05/2021**

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BT0359IP

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BT0359IP/V007 authorising,

Campact Limited ("the operator"),

whose registered office is

1st Floor Technology House
48 - 54 Goldsworth Road
Woking
GU21 6LE

company registration number 02258069

to operate an installation at

Campact
Anick Grange Road
Hexham
Northumberland
NE46 4JS

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

Name	Date
Philip Lamb	**12/05/2021**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

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

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

1.2 Energy efficiency

1.2.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

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

1.4.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

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

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

2 Operations

2.1 Permitted activities

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

2.2 The site

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

2.3 Operating techniques

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

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

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

2.3.4 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.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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

3.3 Odour

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

3.3.2 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.

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

(a) be legible;

(b) be made as soon as reasonably practicable;

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

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

(i) off-site environmental effects; and

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

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

4.2 Reporting

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

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

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

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

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

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

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

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

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

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

4.3 Notifications

4.3.1 In the event:

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

(i) inform the Environment Agency,

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

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

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

(i) inform the Environment Agency, and

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

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

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator’s trading name, registered name or registered office address; and

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

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

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

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

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

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

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

(a) a decision by the Secretary of State not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State to terminate the agreement; and

(c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
AR1	Section 4.1 Part A(1)(a)(ii), producing organic chemical compounds containing oxygen (for example aldehydes)	Manufacture of formaldehyde	From receipt and storage of raw materials through production, storage and dispatch of final product, including waste storage and handling. Includes export of excess waste heat.
AR2	Section 4.1 Part A(1)(a)(viii), producing organic chemicals such as polymers	Manufacture of amine/formaldehyde resins	From receipt and storage of raw materials through production, storage and dispatch of final product, including waste storage and handling.
	Directly Associated Activity		
AR3	Operation of boiler plant	Medium combustion plant: 11MWth gas/gas-oil steam raising standby boiler	From receipt and storage of raw materials to delivery of service. Includes waste storage and handling. Gas-oil for use only as a back-up fuel in the event of a gas supply interruption.
AR4	Operation of standby generator and air compressors	500kW back-up diesel generator Two air compressors (55kW each)	From receipt and storage of raw materials to delivery of service. Includes waste storage and handling.
AR5	Effluent collection and discharge to sewer	Collection of effluent for discharge to Northumbrian Water's Hexham Sewage Treatment Works	From collection and storage of effluent to disposal to sewer.
AR6	Discharge of roof rainwater	Discharge of rainwater from installation roof via Egger emission point to the River Tyne (Outfall 2)	Uncontaminated rainwater only.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to questions B2.1 to B2.3 given in chapters 2 and 5 of the application.	31/07/2003
Schedule 4 Notice	Response to questions 1 to 14 inclusive.	20/01/2004
Variation Application EPR/BT0359IP/V004	Variation application form C3a and: Campact Ltd EPR Application for Variation, Cooling Tower Replacement Section 2	08/03/2013
Variation Application EPR/BT0359IP/V005	Sections 2 and 3 of the application document.	15/05/2014

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Variation Application EPR/BT0359IP/V006	Sections 2.1 and 2.2 of the Application Supporting Information relating to the new replacement stand-by boiler. Section 2.9 relating to monitoring of the new replacement stand-by boiler.	10/07/2017
Variation EPR/BT0359IP/V007 Response to Regulation 61 Notice	BAT Conclusions Review document dated August 2018, responses to: Production of Large Volume Organic Chemicals (LVOC) BAT Conclusions 2, 8-12, 14, 15, 17-19, 45-47. Common waste water and waste gas treatment/management systems in the chemical sector (CWW) BAT Conclusions 1-5, 7-13, 15, 16, 19.	09/08/2018
Variation EPR/BT0359IP/V007 Request for further information dated 04/09/19	Response to questions on: • LVOC BAT conclusions 2, 11, 12, 16, 19 • Water Framework Directive (WFD) hazardous pollutants risk assessment	04/10/2019
Variation EPR/BT0359IP/V007 Request for further information dated 05/01/21	Response to questions on: • Treatment of formaldehyde in the operator's discharge to Hexham STW • LVOC BAT conclusion 19	28/01/2021
Variation EPR/BT0359IP/V007 Request for further information dated 18/02/21	Response to: • Question 8 on the settlement pit (LVOC BAT 46 and CWW BAT 14) • Question 9 on pH adjustment (LVOC BAT 46 and CWW BAT 10 & 12)	12/03/2021

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
1	The operator shall review all methods of emissions monitoring with the intent to achieve MCERTS accreditation for the monitoring equipment, personnel and organisations employed in the emissions monitoring programme or an equivalent method agreed in writing with the Agency. Techniques shall be in accordance with Agency guidance notes M1 and M2. Proposals for a revised emissions monitoring programme shall be sent to the Agency together with an implementation timetable.	Complete
2	The operator shall introduce a procedure to regularly review all reaction conditions to confirm that all operating conditions have been optimised to minimise the environmental impact. (With particular attention to runaway and gel reactions). The operator shall periodically update the review. The procedure shall be incorporated within the installations EMS and a copy of the written procedure and the outcome of the first review shall be sent to the Environment Agency.	Complete
3	The operator shall review the cost and benefit of options available to further minimise and render harmless the emission from the scrubber exhaust (release point A2). A report of this review shall be sent to the Environment Agency and should include an implementation timetable.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
4	The operator shall provide full details of the final documented noise management plan with associated noise control management plan and noise control actions as described in section 9.6 of the application. The final plan should include an implementation timetable. Progress reports describing progress against established targets shall be sent to the Environment Agency on completion of each phase of the plan.	Superseded
5	The operator shall submit, for approval by the Environment Agency, a report on options for the on-site pretreatment of formaldehyde in their process effluent prior to discharge via emission point S1 to Hexham STW. The report shall include, but not be limited to, the following: • Monitoring data for formaldehyde and flow. • Measures to minimise the discharge of formaldehyde. • Identification of the options available for the on-site pretreatment of formaldehyde (including those described in BAT Reference Document for the Production of Large Volume Organic Chemicals, section 6.4.2.2 Chemical pretreatment). • An assessment of the feasibility of installing these pretreatment options. • A timetable for the implementation of any improvements planned. • Details of how the operator will identify the need for future reviews on the use of on-site pretreatment of formaldehyde (including if requested by the Environment Agency or the sewerage undertaker) and how these will be actioned. The report shall address the following BAT Conclusions: • Production of Large Volume Organic Chemicals **BAT 46** (Emissions to water). • Common waste water and waste gas treatment/management systems in the chemical sector **BAT 10 & 11** (waste water treatment and priority order of techniques). Refer to BAT Conclusions for a full description of the BAT requirements. On receipt of approval in writing from the Environment Agency the operator shall implement any improvements in accordance with the agreed timescales.	12/11/2021

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
6	The operator shall submit a written report to the Environment Agency on the area of land at the north-eastern corner of the site boundary. The report shall include, but not be limited to, the following: • An updated site boundary plan to show the extent of the site boundaries as agreed between Campact Limited and Egger (UK) Limited. • Details from September 2014 onwards of: - Who has been the legal operator on this corner of land. - The activities that have been carried out on this corner of land. - The measures that have been in place to protect land and groundwater. - Any pollution incidents that may have affected land and groundwater in this area (including any investigation and/or remediation). - Any monitoring of soil or groundwater in this area. - Updates to the Site Protection and Monitoring Programme and/or the Site Condition Report. Following a technical assessment of this report by the Environment Agency, the operator shall take the actions agreed in writing to ensure that their site boundary plan (as referred to in condition 2.2.1) accurately reflects the extent of their activities, to a timetable agreed with the Environment Agency.	12/11/2021

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Sulphur content of liquid fuels	Less than 0.1% sulphur content by mass in gas oil and 1% sulphur content by mass in heavy fuel oil

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 Point A1 on emission point plan in Schedule 7	Catalytic oxidiser - Formaldehyde plant waste gases	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	No limit set	--	Annual	EN 14792
		Formaldehyde	5 mg/m^3	Daily mean	6 monthly	US EPA M316
		Total VOCs	75 mg/m^3			EN 12619
			30 mg/m^3 Note 1			EN 12619
A2 Point A2 on emission point plan in Schedule 7	Scrubber - Resin plant waste gases	Formaldehyde	5 mg/m^3	Daily mean	3 monthly	CEN TS 13649
		Total VOCs	200 g/hr			EN 12619
A3 Point A3 on emission point plan in Schedule 7	Medium combustion plant – steam raising standby boiler	Oxides of Nitrogen (NO and NO_2 expressed as NO_2) Note 2	100 mg/m^3	Periodic	Every 3 years	EN 14792
		Carbon monoxide	No limit set			BS EN 15058
A5 Point A5 on emission point plan in Schedule 7	Back-up diesel generator exhaust	No parameters set	No limit set	--	--	--
A6 Point A6 on emission point plan in Schedule 7	Methanol storage tank vents + emergency vents	No parameters set	No limit set	--	--	--
A7 Point A7 on emission point plan in Schedule 7	Methanol storage tank vents + emergency vents	No parameters set	No limit set	--	--	--

Note 1: Limit applies from 07/12/2021

Note 2: Limit applies when fuelled on natural gas

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 (Emission via Egger drains to River Tyne at Outfall 2 on emission point plan in Schedule 7)	Uncontaminated roof rainwater	No parameters set	No limit set	--	--	--

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1 Point S1 on emission point plan in Schedule 7	Surface run-off from process areas and process wastewater discharge	Total daily volume of discharge	No limit set	24-hour total	Continuous	Operator self-monitoring of flow
		Chemical Oxygen Demand (COD)	No limit set	Spot sample	Daily	Operator method QAHEX074 corresponding to ISO 15705
		Formaldehyde				Operator method QAHEX126

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	Every 6 months	1 January, 1 July
	A2	Every 3 months	1 January, 1 April, 1 July, 1 October
	A3	Every 3 years	1 January
Emissions to sewer Parameters as required by condition 3.5.1	S1	Every 3 months	1 January, 1 April, 1 July, 1 October

Table S4.2: Annual production/treatment	
Parameter	**Units**
Production of formaldehyde	tonnes
Production of total resin products	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Waste disposal and/or recovery	Annually	tonnes
Total raw material used	Annually	tonnes
Effluent treatment at Hexham Sewage Treatment Works	Annually	No change/Change Note 1
Note 1: Confirm whether there have been any significant changes at the installation or at Hexham STW that may affect whether treatment off-site at Hexham STW is BAT and provides an equivalent level of protection of the environment as if the effluent were treated on-site.		

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Emissions to Air	Form Air1 or other form as agreed in writing by the Environment Agency	12/05/21
Emissions to Sewer	Form Sewer1 or other form as agreed in writing by the Environment Agency	12/05/21
Water usage	Form WaterUsage1 or other form as agreed in writing by the Environment Agency	12/05/21
Energy usage and efficiency	Form Energy1 or other form as agreed in writing by the Environment Agency	12/05/21

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Other environmental performance indicators	Form Performance1 or other form as agreed in writing by the Environment Agency	12/05/21
Waste disposal and recovery	Form Waste1 or other form as agreed in writing by the Environment Agency	12/05/21

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	

Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“annually” means once every year.

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

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

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

“Common waste water and waste gas treatment/management systems in the chemical sector BAT Conclusions or CWW” means Commission Implementing Decision (EU) 2016/902 of 30 May 2016 establishing Best Available Techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for Common Waste Water And Waste Gas Treatment/ Management Systems in the Chemical Sector as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

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

“emissions to land” includes emissions to groundwater.

“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.

“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.

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

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

“Hazardous 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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“Large Volume Organic Chemicals BAT Conclusions or LVOC” means The Commission Implementing Decision (EU) 2017/2117 of 21 November 2017 establishing Best Available Techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the Production of Large Volume Organic Chemicals as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

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

“Medium Combustion Plant” or ”MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion

plants, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

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

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:

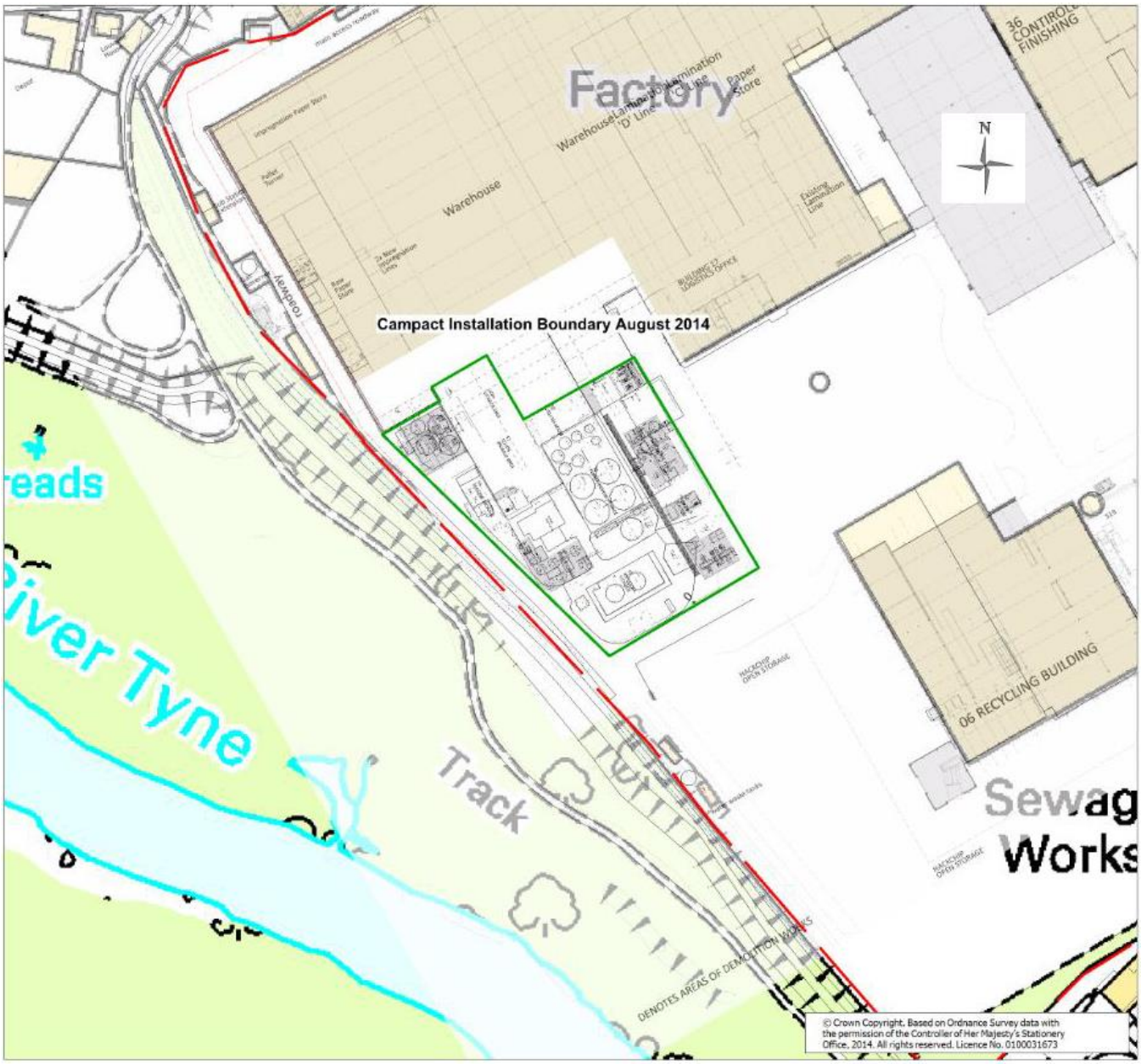
- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan

Site boundary plan

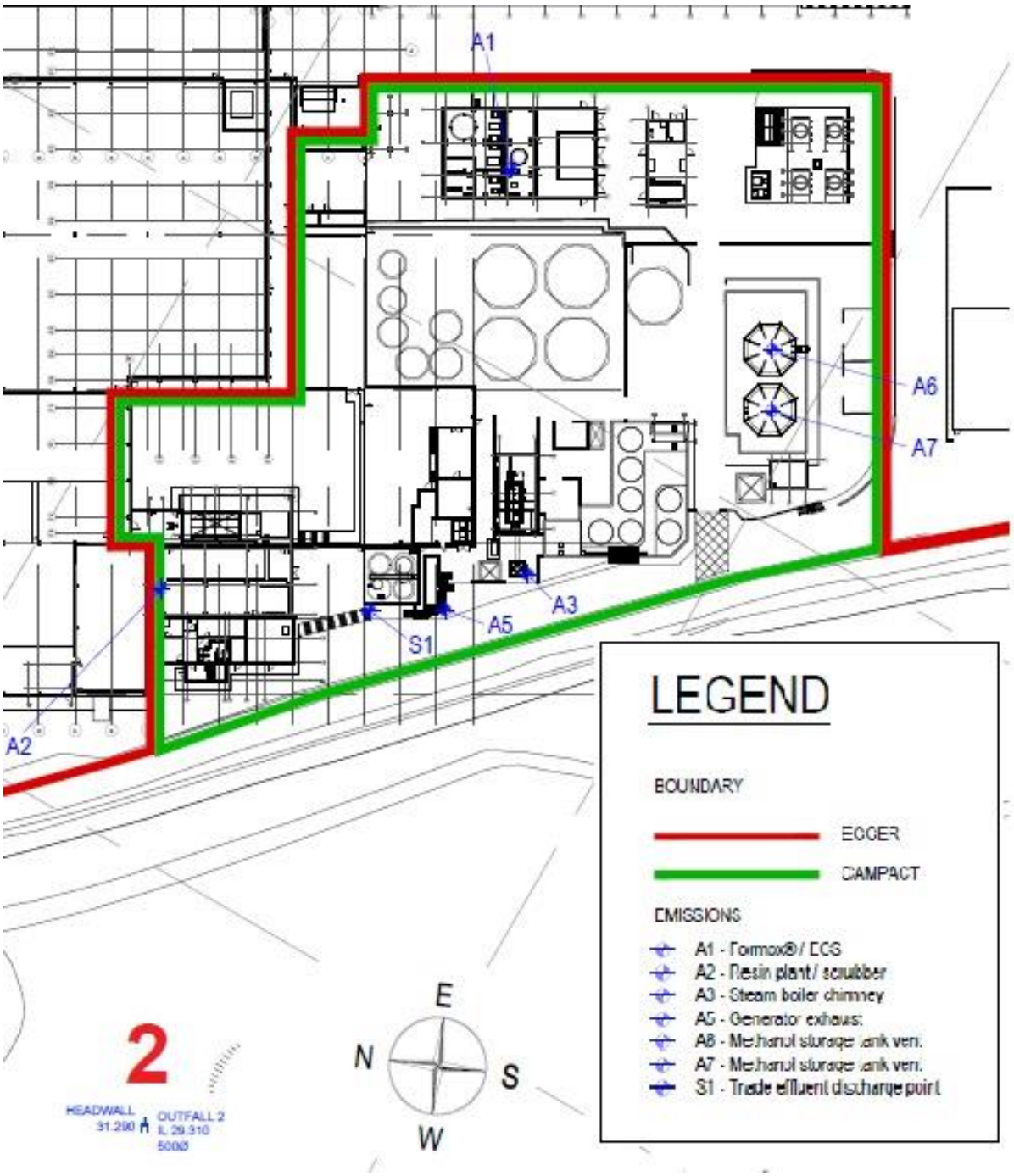
Green line shows site boundary, as referred to from condition 2.2.1.



Emission point plan

Emission points as referred to from Table S3.1, Table S3.2 and Table S3.3

(Boundary lines are not representative of the site boundary referred to from condition 2.2.1.)



Extracts of Drawing HEX-99-129 reproduced with permission.

END OF PERMIT

Permit Number: BT0359IP **Operator: Campact Limited**

Facility: Campact **Form Number: Air1 12/05/21**

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

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
Quarterly reporting							
A2	Formaldehyde	5 mg/m^3	Daily mean				
A2	Total VOCs	200 g/hr	Daily mean				
Biannual reporting							
A1	Formaldehyde	5 mg/m^3	Daily mean				
A1	Total VOCs	75 mg/m^3	Daily mean				
		30 mg/m^3 from 07/12/2021					
Annual reporting							
A1	Oxides of Nitrogen	-					
Every 3 years							
A3	Oxides of Nitrogen	100 mg/m^3					
A3	Carbon monoxide	-					

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

Signed ……. Date……..

(Authorised to sign as representative of Operator)

Permit Number: BT0359IP **Operator: Campact Limited**

Facility: Campact **Form Number: Sewer1 12/05/21**

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

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
S1	COD mg/l						
S1	Formaldehyde mg/l						
S1	Flow						

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

Signed ……. Date……..

(Authorised to sign as representative of Operator)

Permit Number: BT0359IP **Operator: Campact Limited**

Facility: Campact **Form Number: WaterUsage1 12/05/21**

Reporting of Water Usage for the year YYYY

Water Source	Usage (m^3/year)	Specific Usage (m^3/unit output)
Mains water		
Site borehole		
Reverse osmosis water		
River abstraction		
Other (specify)		
TOTAL WATER USAGE		

Trends in Mains Water Usage		
Year	**Total Water Usage**	**Specific Usage (m^3/unit output)**

Operator's comments:

Signed ……. Date……..

(authorised to sign as representative of Operator)

Permit Number: BT0359IP **Operator: Campact Limited**

Facility: Campact **Form Number: Energy1 12/05/21**

Reporting of Energy Usage and Energy Efficiency for the year YYYY

Energy Source	Quantity Used	Primary Energy Usage (MWh)	CO2 produced (tonnes)
Electricity*			
Natural gas			
Gas Oil			
Other (Specify)			
Total			

* Conversion factor for delivered electricity to primary energy = _____

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

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

Operator's comments:

Signed ……. Date……..

(authorised to sign as representative of Operator)

Permit Number: BT0359IP **Operator: Campact Limited**

Facility: Campact **Form Number: Performance1 12/05/21**

Reporting of Environmental Performance for the year YYYY

Annual Production/Treatment	
Production of formaldehyde	tonnes
Production of resins	tonnes

Environmental Performance Indicators

Parameter	Annual average	Units
Energy		
Water use (towns)		
Waste Disposal Score		
Waste generation		
Total raw material used		
Effluent treatment at Hexham STW [1]	No change OR Change (details required)	

Trends in Environmental Performance Parameter (per unit production)				
Year	Production (t/a)	CO2/t	Tonnes water/t	Tonnes waste/t

Note 1: Confirm whether there have been any significant changes at the installation or at Hexham STW that may affect whether treatment off-site at Hexham STW is BAT and provides an equivalent level of protection of the environment as if the effluent were treated on-site.

Operator's comments:

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

Permit Number: BT0359IP **Operator: Campact Limited**

Facility: Campact **Form Number: Waste1 12/05/21**

Reporting of Waste Disposal and Recovery for the year YYYY

Waste Description	Route	Disposal	Recovery
		Tonnes	Tonnes
Hazardous			
Formaldehyde catalyst			
Non-hazardous			
Resin wastes - solid			
Resin wastes - liquid			
TOTAL WASTE			

Trends in Waste Disposal and Recovery		
Year	Total Waste (tonnes))	Waste per unit output
	Disposal Recovery	

Operator's comments:

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