

Variation reference number: 479

Schedule 2

Operator	Bischof & Klein (UK) Limited
Installation Address	Hortonwood 2 Telford Shropshire TF1 7XX
Permit Reference	99/040425
Grid Reference	SJ683130
Registered Office	Bischof & Klein (UK) Ltd Hortonwood 2 Telford Shropshire TF1 7XX

Bischof & Klein (UK) Ltd ("The Operator") ("The Operator") is hereby permitted by Telford & Wrekin Council ("The Regulator") to carry out the following activities:

Surface treating substances, objects or products using organic solvents, in plant with a consumption capacity of more than 150kg or more per hour than 200 tonnes per year as defined under Schedule 1, Part 2, Section 6.4(A2)(a), of The Environmental Permitting (England and Wales) Regulations 2016 ("the Regulations").

The solvent emission activity known as printing as described under the Industrial Emissions Directive Annex VII, Part 1, 9(a) and Schedule 14 of the Regulations.

To the extent authorised by and subject to the conditions of this permit and within the installation boundary outlined in red within Schedule 6 of this permit.

Signed: 

Name: Clair Travis

Date: 7 April 2025

Environmental Health Officer

Authorised by the Borough of Telford and Wrekin to sign in that behalf

Contact Details

The contact address, telephone number and email address for all correspondence in terms of the permit is as follows:

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Telford and Wrekin Council
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Introductory Note

This Introductory provides relevant information related to this Permit

The 'surface treatment using organic solvents, including wood and wood products preservation with chemicals' BAT reference document (BREF) and BAT conclusions have been reviewed and published on 9 December 2020 as required by Article 13 of the Industrial Emissions Directive (IED).

Article 21 of the IED requires the Regulator to periodically reconsider permit conditions and update them where necessary to ensure compliance with best available techniques described in applicable BAT conclusions.

Telford and Wrekin Council (The Regulator) have reviewed this permit against the revised BAT Conclusions. This variation makes the below changes following the review under Article 21(3) of the IED and the consolidation of the Environmental Permitting Regulations that came into force on the 4 January 2017:

- Inclusion of improvement programme in table S1.3, this requires the operator to provide reports to demonstrate compliance with the new BATC standards and submit information, or modify plant, procedures or controls to satisfy the new standards and for compliance by the due date;
- Revised emission limits and monitoring requirements for emissions to air applicable from 9th December 2024 in table S2.1;
- Revised conditions, structure and layout of the permit to align with the template provide by the LAU to facilitate compliance via the implementation of appropriate management plans prepared by the operator to demonstrate compliance with BAT.

Status Log

Detail	Dates
Date Permit First Issued	23/02/2010
Date of Variations	08/03/2016
Date of Latest Variation – 479 Change of Permit reference number. Permit upgraded with latest Legislation	07/04/2025

Process Description

The installation produces flexible packaging for commercial industry using flexographic printing presses and solvent borne inks.

The installation produces the polythene film for which the majority is utilised within the printing process. There is a solvent based printer (352) within this area which extracts via an unabated stack to atmosphere.

Raw materials

Solvent based raw materials are stored externally within the locked flammable storage yard. They are stored within enclosed bunded units. The yard surface run-off is captured within the site interceptor. Raw materials are removed when required and taken to the ink room.

The ink room houses the enclosed mixing system. The raw materials in use are stored in varied sized containers, from 1000 litre IBC's, 205 litre drums and 20 litre tins. The mixing system is enclosed and controlled by an electronic system. Press returns are also stored within the ink room.

The glue room contains the overground storage tank of solvent based glue. This is transferred by hand to the relevant area. This room has an unabated stack to atmosphere.

The solvent pump room is a bunded building suitable for the storage and use of 2 x 1000 litre IBCs of solvent. The solvent is pumped using an enclosed system to the printing presses where solvent is dosed into ink sumps to control the viscosity of the inks. The solvent pump room is bunded and has natural ventilation.

Printing

There are currently four printing presses which carry out flexographic printing activity. Press ready ink is pumped into the machine using an ink tray transfer system. Once printed, the substrate is then passed through the dryer to cure the print and then is wound onto reels and stored as finished goods.

The printer is then 'solvent washed' before commencing the next print run. The print wash is then recycled in the solvent recycling unit. Cleaned solvent is stored in 205 litre drums ready to be used as print wash and the waste solvent sludge is stored in 205 litre drums in the flammable storage area, before being sent as off-site waste recycling.

Equipment cleaning

The solvent room contains the equipment cleaning unit (solvent based cleaning), which is an automatic enclosed unit with an unabated stack to atmosphere. The cleaning solvent is recycled within the unit until it is saturated with solids. The contaminated solvent is then processed through the recovery unit and returned. The

solvent recovery unit is also housed within the room. The solvent room has its own unabated stack to atmosphere for emissions.

Cylinder cleaning is carried out in an enclosed unit, using water-based cleaning solution. This unit is not extracted to atmosphere.

Waste

Waste materials from the activity are kept within designated areas outside. Solvent contaminated waste is kept within the external flammable area, in sealed containers, until such time they are removed by authorised waste carriers.

Abated and unabated emissions

Emissions from the press dryers are directed to the gas fired regenerative thermal oxidiser (RTO), which treats the waste gases by incineration. Gas is used to heat the unit to the required temperature, whereby the waste solvent laden emissions then 'fuel' the RTO. Emissions from the RTO are then direct to atmosphere. There is an emergency bypass stack fitted to the RTO.

There are several unabated stacks from the printing presses, solvent room and solvent recovery unit, which emit to atmosphere either as direct or localised extraction.

A list of the stacks has been provided below. These have been included into the conditions of the permit and emissions will be included within the mass balance report. Those which are described as abated stacks and unabated direct extraction stacks shall also have emission limits as well as detailed within the mass balance report. Those described as localised extraction shall only be included within the mass balance report.

Roof extraction without a stack, cannot be assessed for solvent release and are fugitive emissions. These are detailed on the map in schedule 6, numbered 13, 14, 15, 16, 17 and 18, but are left out of the table below.

Stack number	Location	Description
1	RTO	abated stack - direct extraction
2	Ink room	unabated stack - localised extraction
3	Glue room	unabated stack - localised extraction
4	352 equipment cleaning unit	unabated stack - direct extraction
5	403 press	direct - unabated bypass stack
6	404 press	direct - unabated bypass stack
7	405 press	direct - unabated bypass stack
8a	406 press	direct - unabated bypass stack
8b	406 press	direct - unabated bypass stack
9	Solvent recovery unit	direct - unabated bypass stack
10	Solvent room	unabated stack - localised extraction
12a	480 press	direct - unabated bypass stack
12b	480 press	direct - unabated bypass stack
12c	480 press	direct - unabated bypass stack

Combined heat and power unit (CHP)

There is a combined heat and power unit within the site boundary, which is operated by another company and regulated by the Environment Agency. It is not regulated by this permit. This installation may use the energy from the CHP in future.

End of Introductory Note

Permit Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities;
- a. in accordance with a written environmental 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 The environmental management system shall be subject to regular independent external auditing.
- 1.1.4 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.
- 1.1.5 The best available techniques shall be used to prevent, or where that is not practicable, reduce the emissions from the installation in relation to any aspect of the activity which is not specifically regulated by any condition of this permit.

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 are used efficiently in the activities;
- b. maintain records of raw materials 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 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.
- d. 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 6 to this permit.

2.3 Operating techniques

- 2.3.1 For the activities referenced in schedule 1, table S1.1, 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 Regulator.
- 2.3.2 If notified by the Regulator that the activities are giving rise to pollution, the operator shall submit to the Regulator 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 Regulator.
- 2.3.3 The operator shall;
- identify the process areas, sections or steps that make the greatest contribution to VOC emissions and energy consumption, which have the greatest potential for improvement;
 - identify and implement actions to minimise VOC emissions and energy consumption;
 - review progress and update actions on an annual basis.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, the waste operation is provided with the following information, prior to the receipt of the waste;
- the nature of the process producing the waste;
 - the composition of the waste;
 - the handling requirements of the waste;
 - the hazardous property associated with the waste, if applicable; and
 - 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 Regulator.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Regulator, the operator shall notify the Regulator 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 2 table S2.1.
- 3.1.2 The limits given in schedule 2 shall not be exceeded.
- 3.1.3 The fugitive annual emissions from the emission point(s) set out in schedule 2 table S2.1, of a substance listed in schedule 2 table S2.2 shall not exceed the relevant limit in table S2.2.
- 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.
- 3.1.5 The operator shall;
- a. maximise the availability and performance of equipment critical to the protection of the environment;
 - b. record all periods of other than normal operating conditions (OTNOC), their cause and duration and where possible their effect on emissions.

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 Regulator that the activities are giving rise to pollution, submit to the Regulator 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 Regulator.

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 Monitoring

3.3.1 The operator shall, unless otherwise agreed in writing by the Regulator, monitor fugitive VOC emissions by compiling, at least on an annual basis, a solvent mass balance (SMB) of the solvent inputs and outputs of the plant, as defined in Part 7(2) of Annex VII to Directive 2010/75/EU.

3.3.2 The solvent mass balance shall include:

- a. identification and documentation of solvent inputs and outputs, (e.g. emissions in each waste gases source, emissions from each fugitive emission source, solvent output in waste, etc.);
- b. substantiated quantification of each relevant solvent input and output and recording of the methodology used (e.g. measurement, calculation using emission factors, estimation based on operational parameters);
- c. identification of the main sources of uncertainty of the aforementioned quantification, and implementation of corrective actions to reduce the uncertainty;
- d. regular update of solvent input and output data.

3.3.3 The solvent mass balance calculation methodology shall be agreed in writing by the Regulator.

3.3.4 The operator shall, unless otherwise agreed in writing by the Regulator, undertake the monitoring specified in the following tables in schedule 2 to this permit:

- a. point source emissions specified in tables S2.1,
- b. process monitoring specified in table S2.3.



- 3.3.5 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.
- 3.3.6 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.4, shall have either MCERTS certification or MCERTS accreditation (as appropriate), unless otherwise agreed in writing by the Regulator.
- 3.3.7 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 2 table S2.1, unless otherwise agreed in writing by the Regulator.

3.4 Odour

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by the Regulator, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.4.2 The operator shall:
- a. if notified by the Regulator that the activities are giving rise to pollution outside the site due to odour, submit to the Regulator 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 Regulator.

3.5 Noise and vibration

- 3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived the Regulator, 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.

3.5.2 The operator shall;

- a. if notified by the Regulator that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Regulator 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 Regulator.

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 Regulator, 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 environmental management system required to be maintained by this permit, unless otherwise agreed in writing by the Regulator.

4.2 Reporting

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

- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Regulator, 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 3 table S3.1;
 - b. for the reporting periods specified in schedule 3 table S3.1 and using the forms specified in schedule 3 table S3.4; and
 - c. giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.3 A report or reports on the performance of the activities over the previous year shall be submitted to the Regulator by 31 January (or other date agreed in writing by the Regulator) 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 3 table S3.2; and
 - c. the performance parameters set out in schedule 3 table S3.3 using the forms specified in table S3.4 of that schedule.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Regulator, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 The operator shall submit an annual solvent management plan (SMP) in order to demonstrate compliance with the requirements of the Industrial Emissions Directive, by 31 January each year in respect of the previous year.

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 Regulator,
 - 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 Regulator, 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 4 to this permit within the time period specified in that schedule.

4.3.3 Where the Regulator 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 Regulator when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Regulator at least 14 days before the date the monitoring is to be undertaken.

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

- a. Where the operator is a registered company:
 - i. any change in the operator's trading name, registered name or registered office address; and
 - ii. any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.



- b. Where the operator is a corporate body other than a registered company:
 - i. any change in the operator's name or address; and
 - ii. 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 Regulator 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 Regulator 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 Regulator 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 - The activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
S6.4 A(2) (a)	Surface treating substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, in plant with a consumption capacity of more than 150kg or more per hour than 200 tonnes per year.	Receipt of raw materials to application of inks, coatings, lacquers and adhesives onto substrates to produce final composite product
Directly Associated Activities		
Storage and handling of raw materials	Storage of solid and liquid materials in bulk storage tanks, drums, IBCs, bags and other containers	Receipt and storage of raw materials to transfer to process areas
Storage, handling and dispatch of intermediates, finished products, waste & other materials	Storage of intermediates and finished products. Process waste segregation and storage	Internal & external storage of finished products, storage of waste in designated areas and loading for transit off site
Control & abatement systems for emissions to air	Abatement of releases to air	Extraction and collection of waste gases and treatment in condensers, recovery units, carbon beds and thermal oxidisers

Table S1. 2 - Operating techniques

Description	Parts	Date Received
Review of Environmental Management System (EMS)	<p>Summary of review of BAT 1. Site has ISO14001: 2015 Environmental Management System Manual, Dated February 2024 (version 3)</p> <p>System procedures are as follows:</p> <p>SP01 – Internal and External issues</p> <p>SP02 – Interested parties</p> <p>SP03 – Environmental aspects</p> <p>SP04 – Compliance obligations</p> <p>SP05 – Actions to address risks and opportunities</p> <p>SP06 – Environmental objectives</p> <p>SP07 – Competence, training and awareness</p> <p>SP08 – Communication</p> <p>SP09 – Documented information</p> <p>SP10 – Emergency preparedness and response</p> <p>SP11 – Monitoring, measurement, analysis and evaluation</p> <p>SP12 – Evaluation of compliance</p> <p>SP13 – Internal audit</p> <p>SP14 - Management review</p> <p>SP15 – non-conformity and corrective action</p>	11/7/2024

Table S1. 2 - Operating techniques

Description	Parts	Date Received
	Operating Control Procedures are as follows: OCP01 – Waste control procedure OCP 02 – Energy conservation procedure OCP 03 – Contractor procedure OCP 04 – Environmental emergencies procedure OCP 05 – Granule delivery procedure OCP 06 – Oils and solvent handling procedure OCP 07 – Packaging waste regulations procedure OCP 08 – Air emissions control procedure OCP 09 – Routine external housekeeping procedure	14/02/2025
	Summary review of BAT 2	14/02/2025
	Summary of BAT 3 – spillages and leaks and SP10 – Emergency preparedness and response OCP 04 Environmental emergencies procedure	11/7/2024
BAT Reviews	Summary review of BAT 4	14/02/2025
	Summary review of BAT 5 and OCP 06 and 09	11/7/2024

Table S1. 2 - Operating techniques

Description	Parts	Date Received
	Summary review of BAT 6 to 9	14/02/2025
	Summary review of BAT 13 and Aspects and impacts register Daily recorded RTO inspections ENG 01 & 02 - Engineers RTO procedures Engineers daily RTO check log	14/02/2025
	Summary of the BAT review BAT 14 to 17 and BAT 28	14/02/2025
	Summary review of BAT 22 and OCP01 – Waste control procedures OCP07 – Packaging waste regulations procedure	14/02/2025
Energy Efficiency	Energy Efficiency Plan (BAT 19) - See table S1.3 IP1 and CCL reporting data ENV18 - Energy use policy statement	Partially received

Table S1. 2 - Operating techniques		
Description	Parts	Date Received
Odour management plan	OCP 08 - Air emissions control procedure	11/07/2024
Site closure plan	HE18/3190 - Decommissioning management plan Site condition report from A2 application	14/2/2025 11/7/2023

Table S1. 3 - Improvement programme requirements		
Reference	Requirement	Date
IP1	The operator will carry out a review of energy efficiency, as described in condition 1.2 taking account of BAT 19 and table 3 of the STS BAT conclusions.	9 December 2024
IP2	The operator shall carry stack monitoring as required by table 2.1 and carry out an investigation to determine the Kg C/h of the following stack numbers 4, 5, 6, 7, 8a, 8b, 9, 12a, 12b and 12c during normal operations. The Operator will produce a report which details the results and specifies the monitoring frequency for each stack. (BAT 11).	9 December 2024
IP3	The operator shall submit for approval a report to both assess the current state of the site of the installation and propose a satisfactory programme of monitoring and risk management where the process involves the use, production or release of hazardous substances as defined by Article 3(18) of the Industrial Emissions Directive. The report shall follow both the revised H5 guidance on Site Condition reports and the Defra guidance baseline report- Defra guidance – Industrial emissions Directive EPR guidance on Part A installations (section 5.10-5.15, pages 28-29)]	31 December 2025

Schedule 2 – Emissions and monitoring

Table S2.1- Point source emissions to air – emission limits and monitoring requirements						
Schedule 6, site plan emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Stack 1	Thermal Oxidiser	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/Nm ³	Average over the sampling period	Minimum of once per year	BS EN 14792
Stack 1	Thermal Oxidiser	Carbon monoxide	100 mg/Nm ³	Average over the sampling period	Minimum of once per year	BS EN 14792
Stack 1	Thermal Oxidiser	TVOC	20 mg/Nm ³	Average over the sampling period	Minimum of once per year if mass emission is 0.1 to 10 kg C/h	BS EN 12619
Stack 4, 5, 6, 7, 8a, 8b, 9, 12a, 12b and 12 c	Unabated stacks	TVOC	20 mg/Nm ³	Average over the sampling period	Minimum of once per year if mass emission is 0.1 to 10 kg C/h	BS EN 12619
Stack 4, 5, 6, 7, 8a, 8b, 9, 12a, 12b and 12 c	Unabated stacks	TVOC	20 mg/Nm ³	Average over the sampling period	Once every 3 years if mass emission is < 0.1 kg	BS EN 12619
Stacks 2, 3 and 10	Unabated stacks	TVOC	To determine Kg C/h from each stack.	Average over the sampling period	Once every 3 years	BS EN 12619

Table S2.2- Annual limits for fugitive emissions		
Substance	Medium	Limit (including unit)
TVOC	Fugitive emissions	< 12% of the solvent input

Table S2. 3- Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Thermal oxidiser	Combustion Temperature	Continuous	Set based on thermal Oxidiser design	With alarm if temperature drops below 850 °C

Schedule 3 - Reporting

Table S3. 1- Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.3.4.	Stacks 1, 3, 4, 5, 6,7, 8a, 8b, 9, 11, 12a, 12b and 12c	Stated in table S2.1	1 January 2025
Groundwater monitoring parameters as required by 3.1.5	Within L1 boundary line detailed in Schedule 6	Every 5 years	1 January 2025
Groundwater monitoring parameters as required by 3.1.5	Within GW 1 boundary line detailed in Schedule 6	Every 10 years	1 January 2025

Table S3. 2- Annual production/treatment	
Parameter	Units
Solvent Consumption	tonnes
Solvent Mass Balance (SMB) as required by condition 3.3.1	As required in SMB
Solvent management plan (SMP) as required by condition 4.2.5	As required in SMP

Table S3. 3- Performance parameters		
Parameter	Frequency of assessment	Units
Specific energy consumption	Annually from 1 January 2025	Wh/m ² of printed area
Operating techniques as described in condition 2.3.3	Annually from 1 January 2025	As described within the condition
Energy review as described in condition 1.2.1 (b)	Every four years from 1 January 2025	As described within the condition
Raw material review as described in condition 1.3.1 (c)	Every four years from 1 January 2025	As described within the condition
Waste review as described in condition 1.4.1 (d)	Every four years from 1 January 2025	As described within the condition

Table S3. 4 - Reporting forms		
Media/parameter	Reporting format	Form Version Number and date
Air	Emissions to Air Reporting Form	V1. 01/01/2025
Energy	Energy usage reporting form located in schedule 3	V1. 01/01/2025
Performance parameters	Performance parameters reporting form in Schedule 3	V1. 01/01/2025

Schedule 3 - Emissions to Air Reporting Form

version 1, 01/01/2025

Permit number: [permit number]

Operator: [e.g Smith and Jones Ltd]

Address: [site address]

Reporting of emissions to air for the period from [DD/MM/YY] to [DD/MM/YY]

Emission point	Substance / parameter	Emission Limit Value	Reference period	Test method ¹	Result ²	Sample dates and times ³	Uncertainty ⁴
[e.g. Stack 1]	[e.g. carbon monoxide]	[e.g. 100 mg/m ³]	[e.g. daily average]	[e.g. BS EN 14792]	[State result]	[State relevant dates and time periods]	[State uncertainty if not 95% confidence interval]

Signed: [signature]

Print Name: [Name]

Date: [DD/MM/YY]

(Authorised to sign as representative of the operator)

Guidance for use of Air Reporting Form: Use this form to report your monitoring results.

Example text is shown in brackets. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 2 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- ¹ Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Regulator, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- ² Give the result as 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, give the result as the 'minimum to maximum' of the measured values.
- ³ For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- ⁴ Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

Schedule 3 - Energy Usage Reporting Form

version 1, 01/01/2025

Permit number: [permit number]

Operator: [e.g Smith and Jones Ltd]

Address: [site address]

Reporting of energy usage for the year [YYYY]

Energy source	Energy consumption / production (MWh)	Specific energy consumption (MWh/unit) ²
Electricity imported as delivered - source [specify source, e.g. supplied from the national grid]	[insert annual consumption in MWh where electricity is imported]	[insert annual consumption in MWh/unit where electricity is imported]
Electricity imported as primary energy 1 – conversion factor of [specify conversion factor used to convert electricity delivered to primary energy]	[insert annual consumption in MWh where electricity is imported]	[insert annual consumption in MWh/unit where electricity is imported]
Natural gas	[insert annual consumption in MWh where natural gas is used]	[insert annual consumption in MWh/unit where natural gas is used]
Gas oil – conversion factor of [specify conversion factor used to convert tonnes to MWh]	[insert annual consumption in MWh where gas oil is used]	[insert annual consumption in MWh/unit where gas oil is used]
Imported heat	[insert annual consumption in MWh where heat is imported]	[insert annual consumption in MWh/unit where heat is imported]
Other – [specify other energy source and conversion factors where applicable, e.g. renewable fuel. Add extra rows where needed]	[insert annual consumption in MWh where applicable]	[insert annual consumption in MWh/unit where applicable]
Electricity exported	[insert annual production in MWh where electricity is exported]	Not applicable
Heat exported	[insert annual production in MWh where heat is exported]	Not applicable

Operator's comments

Signed: [Signature] **Name:** [Print Name]
(Authorised to sign as representative of the operator)

Date: [DD/MM/YY]

Guidance for use of Energy Usage Reporting Form: Use this form to report your annual energy usage.

Example text is shown in brackets. Replace the example text by entering your own site-specific information. Add additional rows as necessary or remove rows not relevant to your energy use.

¹ Multiply delivered electricity by 2.4 to convert to primary energy where the electricity is supplied from the national grid. If the electricity is supplied from another source, specify the conversion factor used. Add additional rows as needed if electricity is imported from multiple sources.

² Divide energy consumption by an appropriate unit of raw material processed or product output.

Schedule 3 - Other Performance Parameters Reporting Form

version 1, 01/01/2025

Permit number: @ @ @
Address: @ @ @

Operator: @ @ @

Reporting of other performance parameters for the period from [DD/MM/YY] to [DD/MM/YY]

Parameter	Units
[e.g. Total raw material usage]	[e.g. tonnes per production unit]

Operator's comments

Signed: [signature] **Name:** [print name]
(Authorised to sign as representative of the operator)

Date: [DD/MM/YY]

Guidance for use of Other Performance Parameters Reporting Form:

Use this form to report the performance parameters (other than energy) required by your permit.

Example text is shown in brackets. Replace the example text by entering your own site-specific information. The parameters to report and units to be used can be found in the 'Performance parameters' table in schedule 3 of your permit. Add additional rows as necessary.

Schedule 4 - 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	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	
Measures taken, or intended to be taken, to stop the emission	

(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 (authorised to sign on behalf of the operator)	
Position in company	
Signature	
Date	

Schedule 5 - Interpretation

“abatement equipment” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

“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 4 to the EP Regulations.

“authorised officer” means any person authorised by the Regulator 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.

“CEM” Continuous emission monitor

“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 2 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

“emissions to land” includes emissions to groundwater.

“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 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

“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.

“ISO” means International Standards Organisation.

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

"pollution" means emissions as a result of human activity which may—

- (a) be harmful to human health or the quality of the environment,
- (b) cause offence to a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

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

- no liquids will run off the surface otherwise than via the system.
- all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged.

"Organic Compound" means any compound containing at least the element carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates.

"STS BAT Conclusions" BAT Conclusions for surface treatment using organic solvents including preservation of wood and wood products with chemicals published on 9th December 2020

"Volatile Organic Compound (VOC)" means any organic compound means any organic compound as well as the fraction of creosote, having at 293.15 K, a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

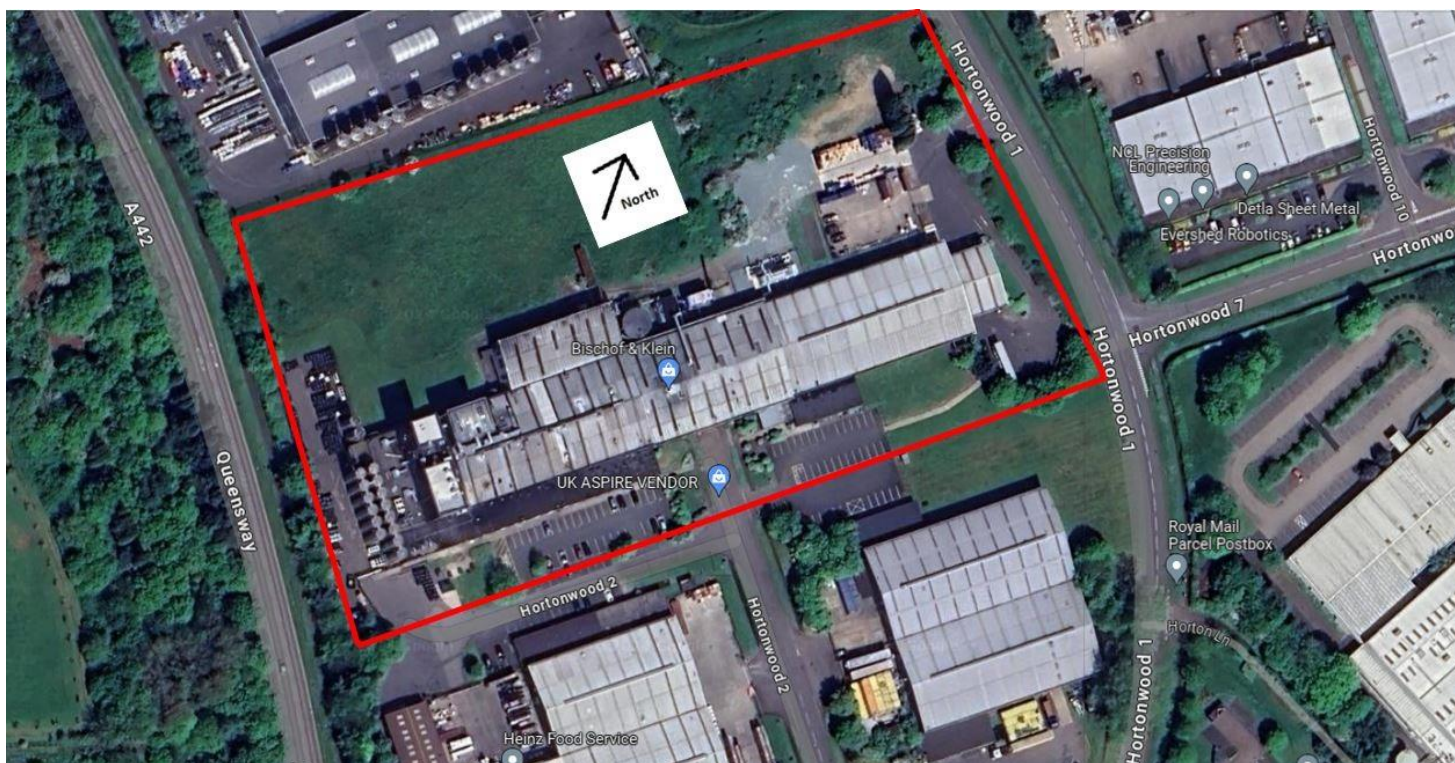
"year" means calendar year ending 31 December.

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

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

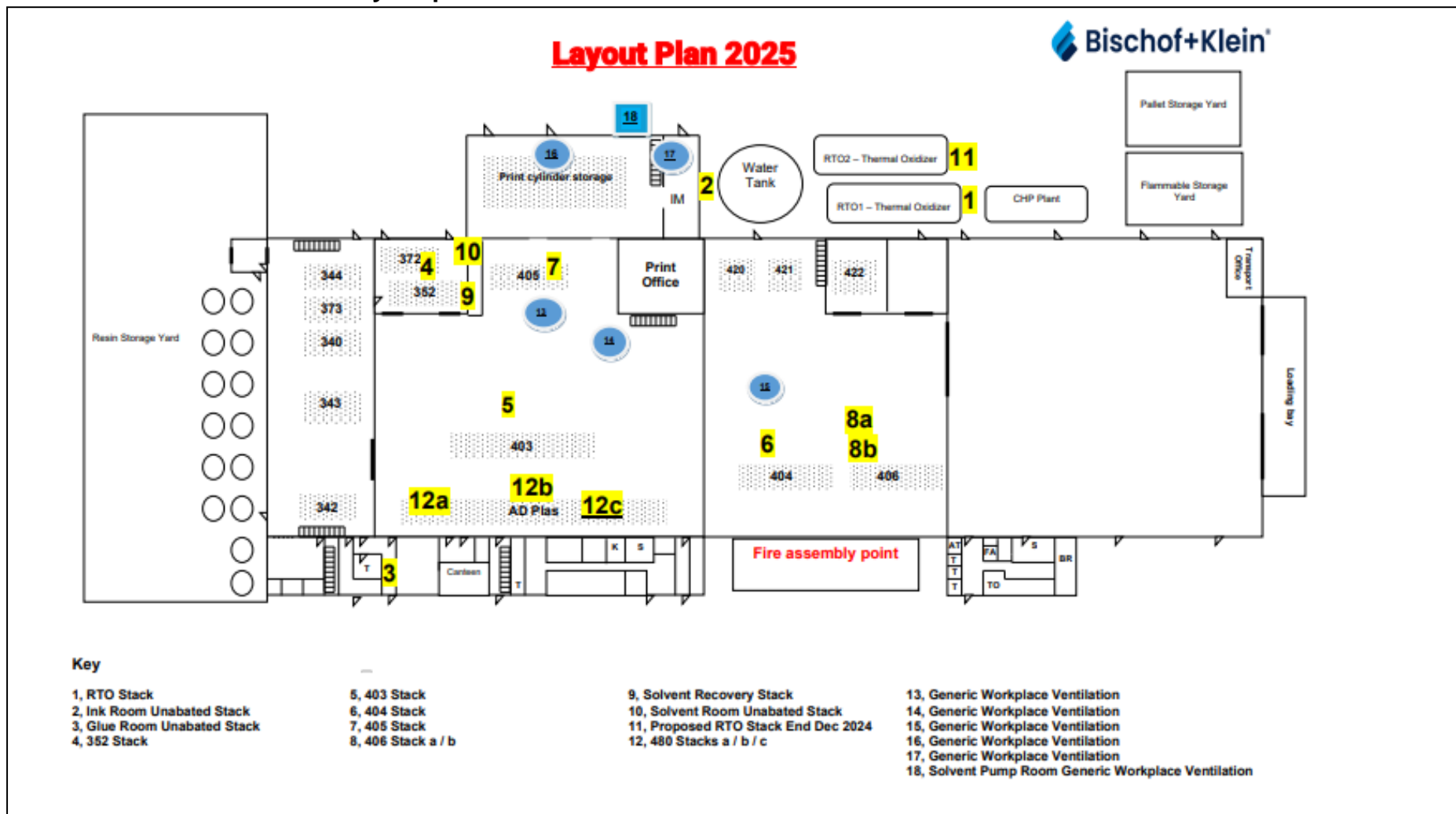
- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the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

Schedule 6 – Boundary of site and L1 & GW1 boundary line,



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Schedule 6 continued – Site layout plan



End of permit