

**Bath & North East
Somerset Council**

Hereby permits:

Integrity Print Limited, Westfield Industrial Estate, Midsomer Norton,
Bath BA3 4BS

To operate a Part B installation at:

Integrity Print Limited, Westfield Industrial Estate, Midsomer Norton,
Bath BA3 4BS

Under the provisions of:

POLLUTION PREVENTION AND CONTROL ACT 1999
ENVIRONMENTAL PERMITTING (ENGLAND AND WALES)
REGULATIONS 2016

Permit reference:

EP 097/2

Signed on behalf of Bath and North East Somerset Council

Signed: 

Date: 2nd June 2023

Leigh Sanderson

**Specialist Officer – Water & Environmental Permitting
An authorised officer of the Council**

INTRODUCTORY NOTE

This introductory note does not form part of the permit.

This Environmental Permit (the Permit) is issued by Bath and North East Somerset Council (the Council) under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016 No.1154), to operate an installation prescribed in Schedule 1, Part 2, Section 6.4, Part B of those regulations to the extent specified in the conditions of this permit.

The requirements of this Permit shall be effective from the date of service unless otherwise specified within the Permit. Where a Variation Notice has been served, the conditions contained within that Variation Notice shall be effective from the date that the Notice is served, unless a specific implementation date is allocated to specific conditions.

For the purpose of this Permit, the legal operator of the installation is **Integrity Print Limited, Westfield Industrial Estate, Midsomer Norton, Bath BA3 4BS.**

This Permit contains specific conditions that must be complied with. It shall be noted that aspects of the operation of the activity which are not regulated by Permit conditions are subject to the guidance and recommendations detailed within the **Process Guidance Note 6/16 (11) (Revised June 2014) Statutory guidance for printworks.** The Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

DESCRIPTION OF AUTHORISED ACTIVITY

Raw materials in the form of paper rolls are received into store via one of two loading bays. The paper is issued to each printing machine and is subjected to one of the following processes:

Offset Lithography – the process involves the use of water mixed with a small percentage of isopropyl alcohol and other additives used to dampen the printing plate prior to applying a thin film of ink. The water mixture repels ink away from any non-image areas, whereas the image area of the plate accepts ink. The image is then printed onto the paper via a rubber blanket cylinder.

The ink is dried, either by absorption or through UV lamps. Where UV curing takes place, the residual heat and ozone is ducted to atmosphere.

The paper may be trimmed at the edges, perforated and holes punched on each side before being rewound, folded or sheeted. The waste trim and chads are extracted into a compactor or into bags.

Periodically, and at the end of a print run, it is necessary to clean blankets and rollers with an organic solvent.

Flexography – the process uses a raised, inked image that is applied directly to the paper. Ink may be water based and dried by absorption and heat or it may be UV based and cured under UV light.

Similar finishing processes as above are performed and final products are spooled into small reels.

Cleaning down of equipment with organic solvents is performed periodically and at the end of a print run.

Digital Print – the image is transferred to the substrate using coloured toner powders and electrostatic energy. Through the use of heat the image fuses to the substrate. No organic solvents are required in the process or for cleaning operations.

STATUS LOG

The status log sets out the permitting history.

STATUS LOG			
DETAIL	REFERENCE	DATE	COMMENTS
Permit Issued	EPA 97/P1	23.09.2004	Permit issued to Integrity Print Limited
Variation Notice & Consolidated Permit	EPA 97/P2	04.04.2005	Variation notice and consolidated permit issued
Environmental Permit	EPA 97/P2	06.04.2008	Transfer to Environmental Permit by virtue of Regulation 69 of the Environmental Permitting (England and Wales) Regulations 2007
Variation Notice & Permit	EPA 97/P2/V2 & EPA 97/P2/C1	31.05.2012	Variations with regards to new process guidance note and to update print machinery
Variation Notice & Permit	LAPPC 97/P2V3 & LAPPC 97/P2/C2	03.09.2012	Variation to update print machinery
Variation Notice & Permit	LAPPC 97/V4 & LAPPC 97/P3	13.02.2013	Variation to update print machinery
Variation Notice & Permit	LAPPC 97/V5 & LAPPC 97/P4	30.04.2015	Variation to update print machinery
Variation Notice & Permit	EP 097/V1 & EP 097	02.10.2017	Variation following permit review
Variation Notice & Permit	EP097/V2 & EP097/2	02.06.2023	Variation following variation application

End of Introductory Note

PERMIT CONDITIONS**Emission limits and monitoring**

1. The following emission concentration limits shall apply, as detailed in Table 1 below. Monitoring frequencies shall also follow that stated in Table 1, and annual monitoring data shall be sent to the regulator by the end of April each year.

Table 1 – Non VOC emission limits and monitoring			
Substance	Source	Emission limits	Monitoring frequency
Particulate matter	All processes / activities	50mg/Nm ³ as 30 minute mean for contained sources	Annual manual extractive testing
Isocyanates	All processes / activities using isocyanates	0.1mg/Nm ³ as a 15 minute mean for contained sources excluding particulate and expressed as NCO	Annual manual extractive testing

Solvent management plan

2. The operator shall submit an annual Solvent Management Plan (SMP), as per Appendix II of this permit. The SMP must be submitted to the regulator no later than the end of April each year.

Solvent reduction scheme

3. The operator shall demonstrate compliance with the reduction scheme if the annual actual solvent emission determined from the SMP is less than or equal to the target emission, where:

The annual actual solvent emission = I₁-O₈-O₇-O₆ (see Definitions, Appendix II), and

The target emission value = total mass of solids x 1.0

4. The reduction scheme compliance route shall not permit:
 - The replacement of a low or no organic solvent coating system with a conventional high organic solvent coating system; or

- The introduction of such a conventional high organic solvent coating system into a process / activity; or
 - The introduction of such a conventional high organic solvent coating system onto a product where it was not in use before; or
 - The introduction of high solids formulations which have no beneficial effect on the product but increase the solids used, except where a reduction in the overall VOC emissions can be demonstrated.
5. Any proposal to introduce such systems shall be submitted to the regulator and shall include reasons why lower organic solvent systems are not considered technically appropriate or practicable.

Monitoring, investigating and reporting

6. The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. Records shall be :
- kept on-site;
 - kept by the operator for at least two years; and
 - made available for the regulator to examine.
7. If any records are kept off-site they shall be made available for inspection within one working week of any request by the regulator.

Information required by the regulator

8. The operator shall notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. The operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.
9. The results of non-continuous emission testing shall be forwarded to the regulator within 8 weeks of completion of the sampling.
10. Adverse results from any monitoring activity (both continuous and non-continuous) shall be investigated by the operator as soon as the monitoring data has been obtained. The operator shall:
- identify the cause and take corrective action;
 - clearly record as much detail as possible regarding the cause and extent of the problem, and the remedial action taken;

- re-test to demonstrate compliance as soon as possible; and
- inform the regulator of the steps taken and the re-test results.

Visible emissions

11. Emissions from combustion processes in normal operation shall be free from visible smoke. During start up and shut down, the emissions shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742.
12. All other releases to air, other than condensed water vapour, shall be free from persistent visible emissions.
13. All emissions to air shall be free from droplets.

Emissions of odour

14. There shall be no offensive odour outside the site boundary, as perceived by the regulator.

Abnormal events

15. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions, the operator shall:
 - investigate and undertake remedial action immediately;
 - adjust the process or activity to minimise those emissions; and
 - promptly record the events and actions taken.
16. The regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result, if there is an emission that is likely to have an effect on the local community.
17. In cases of non-compliance causing immediate danger to human health, or threatening to cause an immediate significant adverse effect upon the environment, operation of the activity must be suspended. All of the following criteria shall be taken into account:
 - the toxicity of the substances being released;
 - the amount released;
 - the location of the installation; and
 - the sensitivity of the receptors.

Continuous monitoring

18. All continuous monitoring readings shall be on display to appropriately trained operating staff.
19. Chillers shall be fitted with visual indicators, situated appropriately to warn the operator of chiller failure or malfunction.
20. Chiller failure or malfunction shall be recorded.

Compliance monitoring

21. For extractive testing, the data required shall be obtained over a minimum period of 2 hours in total.
22. No result of monitoring shall exceed the emission limit concentrations specified.
23. The introduction of dilution air to achieve emission concentration limits shall not be permitted.

Representative sampling

24. Sampling points on new plant shall be designed to comply with the British or equivalent standards.
25. The operator shall ensure that relevant stacks or ducts are fitted with facilities for sampling which allow compliance with the sampling standards.

Start-up and shut-down

26. The number of start-ups and shut-downs shall be kept to the minimum that is reasonably practicable.
27. All appropriate precautions shall be taken to minimise emissions during start-up and shut-down.

Non-VOC releases control techniques

28. Emissions of particulate matter shall be abated if necessary to meet the emission limit.
29. Where ozone is emitted from equipment and is currently only vented to the external atmosphere it shall in future be ducted to stacks to ensure adequate dispersion.

VOC and odour control storage

30. All potentially odorous waste materials shall be stored in suitable closed containers or bulk storage vessels, where appropriate vented to suitable abatement plant.

31. Bunding shall:

- completely surround the bulk liquid storage containers;
- be impervious and resistant to the liquids in storage; and
- be capable of holding 110% of the combined capacity of the storage containers.

VOC control handling

32. Raw materials containing VOC shall be stored in closed storage containers.

33. All measures shall be taken to minimise VOC emissions during mixing, i.e. the use of covered or closed mixing vessels.

34. Emissions from the emptying of mixing vessels and transfer of materials shall be adequately contained, preferably by the use of closed transfer systems. This may be achieved by the use of closed mobile containers, containers with close-fitting lids, or, preferably, closed containers with pipeline delivery.

VOC control cleaning

35. Cleaning operations involving organic solvents shall be periodically reviewed, at least once every two years, to identify opportunities for reducing VOC emissions (e.g. cleaning steps that can be eliminated or alternative cleaning methods). The regulator shall be provided with a report on the conclusions of the review.

36. Application of cleaning solvents shall be:

- from a contained device or automatic system when applied directly onto machine rollers; and
- dispensed by piston-type dispenser or similar contained device, when used on wipes.

37. When organic solvent is used on wipes:

- pre-impregnated wipes shall be held within an enclosed container prior to use;

- where practicable, no organic solvent cleaning fluids or significantly less volatile organic solvents cleaning fluids shall be used (with or without the addition of mechanical, chemical or thermal enhancements).
38. Where practicable, fixed equipment shall be cleaned in-situ and such equipment shall, where practicable, be kept enclosed whilst cleaning is carried out.
39. Where equipment is cleaned off-line (such as screens, plates, drums, rollers and coating / ink trays) cleaning shall be carried out using enclosed cleaning systems wherever possible. Enclosed cleaning systems shall be sealed to prevent emissions whilst in operation, except during purging at the end of the cleaning cycle. If this is not practicable, emissions shall be contained and vented to abatement plant where necessary.
40. Residual ink / coating contained in parts of the application equipment shall be removed prior to cleaning.

VOC control operational

41. A programme to monitor and record the consumption of inks / coatings / organic solvent against product produced shall be used to minimise the amount of excess organic solvent / coating / ink used.

VOC control waste

42. All reasonably practicable efforts shall be made to minimise the amount of residual organic solvent bearing material left in drums and other containers after use. All organic solvent contaminated waste shall be stored in closed containers.
43. Prior to disposal, empty drums and containers contaminated with organic solvent shall be closed to minimise emissions from residues during storage, and labelled so that all personnel who handle them are aware of their contents and hazardous properties.
44. Nominally empty drums or drums containing waste contaminated with VOC awaiting disposal shall be stored in accordance with the requirements for full or new containers.
45. Prior to collection, used wipes and other items contaminated with organic solvent shall be placed in a secure, labelled, plastic bin which has been provided for that purpose and will be removed intact by the supplier.

Offset lithography

46. For all offset printing, where technically feasible, non-dampening printing methods or physical or inorganic dampening aids shall be used instead of propan-2-ol and other organic compounds.
47. Where organic compounds are present in dampening, the proportion of organic compounds in dampening solutions shall not exceed:
- 10% (by weight) in the case of existing presses, except where these are incapable of running at that level; and
 - 5% (by weight) in the case of new presses.
48. Cooling in order to reduce the evaporation of dampening solutions containing organic compounds shall be installed.

Dust and spillage control

49. Dusty wastes shall be stored in closed containers and handled in a manner that avoids emissions.
50. Dry sweeping of dusty materials shall not normally be permitted unless there are environmental or health and safety risks in using alternative techniques.
51. Suitable organic solvent containment and spillage equipment shall be readily available in all organic solvent handling areas.
52. A high standard of housekeeping shall be maintained.

Stacks, vents and process exhausts

53. Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.

Management systems

54. The operator shall put in place some form of structured environmental management approach.

Training

55. All staff whose functions could impact on air emissions from the activity shall receive appropriate training on those functions including:
- awareness of their responsibilities under the permit;

- steps that are necessary to minimise emissions during start-up and shut-down;
- actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.

56. The operator shall maintain a statement of training requirements for each post with the above mentioned functions, and keep a record of the training received by each person. These documents shall be made available to the regulator on request.

Maintenance

57. The operator shall have the following available for inspection by the regulator:

- a written maintenance programme for all pollution control equipment; and
- a record of maintenance that has been undertaken.

End of Conditions

FURTHER INFORMATION

Confidentiality

The Permit requires the Operator to provide information to Bath & North East Somerset Council. The information will be placed on a public register in accordance with the requirements of the EP Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to Bath & North East Somerset Council to have such information withheld from the register as provided in the EP Regulations. To enable Bath & North East Somerset Council to determine whether or not the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Changes to the Operation

If the Operator proposes to make a change in operation of the installation he must, at least 14 days before making the change, notify the Regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition, 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

Variations to the Permit

This Permit may be varied in the future. If at any time the activity or any aspect of the activity regulated by the Permit conditions changes such that the conditions no longer reflect the activity and require alteration, then an application form providing these details shall be submitted to the Regulator. Please contact the Regulator for an application to vary the Permit conditions.

Surrender of the Permit

Where an Operator intends to cease the operation of the installation (in whole or in part), then an application form providing these details shall be submitted to the Regulator. Please contact the Regulator for an application to surrender the Permit.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit must be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will be allowed unless the Local Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit. Please contact the Regulator for an application to transfer the permit.

Responsibility under workplace health and safety legislation

This Permit is given in relation to the requirements of the EP Regulations. It must not be taken to replace any responsibilities you may have under workplace health and safety legislation.

Appeals

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment or the Secretary of State for Wales, as appropriate. Appeals must be received by the appropriate Secretary of State no later than 6 months from the date of the decision (normally the date on the bottom of the Permit).

Appeals relating to processes in England and Wales should be sent to the Planning Inspectorate at the following address:

The Planning Inspectorate
Environment Appeals Team
3A Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN

Guidance on the appeals procedure is contained in Regulation 31 and Schedule 6 of the EP Regulations.

The appeal must be in the form of a written notice or letter stating that the Operator/person wishes to appeal, and must list the condition(s) which is/are being appealed against. For an appeal to be valid, the following items **must** be included:

- a) a statement of the grounds of appeal
- b) a statement indicating whether the appellant (the person making the appeal) wishes the appeal to be dealt with:
 - by a hearing attended by both parties and conducted by an Inspector appointed by the Secretary of State, or
 - by both parties sending the Secretary of State written statements of their case (and having the opportunity to comment on one another's statements)
- c) a copy of any relevant application
- d) a copy of any relevant permit
- e) a copy of any relevant correspondence between the appellant and the Regulator
- f) a copy of any decision or notice which is the subject matter of the appeal.

At the same time, the Notice of Appeal and documents a) and b) must be sent to the Council, and the appellant should inform the appropriate Secretary of State that this has been done.

Please Note

- An appeal will **not** suspend the effect of the conditions appealed against; the conditions must still be complied with.
- In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the Local Authority either to vary any of these conditions or to add new conditions.
- You will be liable for prosecution if you fail to comply with the conditions of this Permit. If found guilty, the maximum penalty for each offence if prosecuted in a Magistrates' Court is an unlimited fine and/or 6 months imprisonment. In a Crown Court it is an unlimited fine and/or 5 years imprisonment.

Contact details of the Regulator

Environmental Monitoring
Public Protection
Bath & North East Somerset Council
Lewis House
Manvers Street
Bath
BA1 1JG

Tel: 01225 396693
Fax: 01225 477596
Email: environmental_monitoring@bathnes.gov.uk
www.bathnes.gov.uk

Appendix I: Location Plan



Appendix II: Solvent Reduction Scheme

An operator may choose to use the reduction scheme for an installation to achieve emission reductions to a 'target emission' equivalent to those which would have been achieved if the concentration emission limits had been applied.

The following scheme shall operate for installations for which a constant solid content of product can be assumed and used to define the reference point for emission reductions.

The operator shall forward an emission reduction plan, which includes in particular:

- mechanisms to decrease the average solvent content of the total input; and/or
- systems to increase efficiency in the use of solids to achieve a reduction of the total emissions from the installation.

The target emission from an installation shall be calculated by multiplying the total mass of solids in the quantity of coatings used in a year, with the relevant figure given in Table 4.3 on page 30 of PG 6/16(11) (revised June 2014), i.e. the figure is 1.0 for this installation. In determining the total mass of solids:

- all ingredients other than water and organic solvents shall be assumed to form part of the solid coating; and
- solids are all materials in coatings that become solid as a result of curing, polymerisation, or the evaporation of the water or solvent (usually available from the supplier in g/l or non-volatile % mass by weight).

In cases of doubt, the reference standard for the determination of non-volatile % mass by weight is BS EN ISO 3251 (also numbered BS 3900: B18). The test conditions may need to be adjusted for the particular conditions of use or when assessing chemically or radiation cured coatings, where otherwise volatile components react to form part of the dry solid coating.

Compliance with the reduction scheme is achieved if the annual actual solvent emission determined from the solvent management plan is less than or equal to the target emission, where the annual actual solvent emission = $I_1 - O_8 - O_7 - O_6$

Determination of Solvent Consumption

Construction of inventories of materials consumed and disposed of may involve the identification of individual organic solvents or solids. This may give rise to an issue of commercial confidentiality. Information supplied must be placed on the public register, unless exclusion has been granted on the grounds of commercial confidentiality or national security.

A determination of the organic solvent consumption, the total mass of organic

solvent inputs minus any solvents sent for reuse / recovery off-site, shall be made and submitted to the regulator annually, preferably to coincide with the operator's stock-taking requirements. This shall be in the form of a mass balance in order to determine the annual actual consumption of organic solvent (C), where $C = I_1 - O_8$

Solvent Management Plan

Operators buy solvents to replace those lost during the process or included in the product. There are both environmental and cost savings from reducing the losses. The Industrial Emissions Directive requires a solvent management plan to demonstrate compliance with fugitive emission limits, and give the public access to information about solvent consumption etc. The Industrial Emissions Directive provides guidance on what constitutes a solvent input and output. This can be described more simply as needing data on:

Inputs:

How much solvent is:

- bought, whether in pure form or contained in products;
- recycled back into the process.

Outputs:

How much solvent is:

- emitted to air, whether directly or via abatement equipment;
- discharged to water, whether directly or via water treatment;
- sent away in waste;
- lost by spills, leaks etc.;
- leaving the installation in the product.

Definitions

The definitions in Annex VII, Part 7 of the Industrial Emissions Directive are as follows:

Inputs of organic solvent in the time frame over which the mass balance is being calculated (I) -

I₁ The quantity of organic solvents or their quantity in mixtures purchased which are used as input into the process / activity (including organic solvents used

in the cleaning of equipment, but not those used for the cleaning of the products).

I₂ The quantity of organic solvents or their quantity in mixtures recovered and reused as solvent input into the process / activity. (The recycled solvent is counted every time it is used to carry out the activity).

Outputs of organic solvents in the time frame over which the mass balance is being calculated (O) -

O₁ Emissions in waste gases.

O₂ Organic solvents lost in water, if appropriate taking into account waste water treatment when calculating O₅.

O₃ The quantity of organic solvents which remains as contamination or residue in products output from the process / activity.

O₄ Uncaptured emissions of organic solvents to air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.

O₅ Organic solvents and / or organic compounds lost due to chemical or physical reactions (including for example those which are destroyed, e.g. by thermal oxidation or other waste gas or waste water treatments, or captured, e.g. by adsorption, as long as they are not counted under O₆, O₇ or O₈).

O₆ Organic solvents contained in collected waste.

O₇ Organic solvents, or organic solvents contained in mixtures, which are sold or are intended to be sold as a commercially valuable product.

O₈ Organic solvents contained in mixtures recovered for reuse but not as input into the process / activity, as long as not counted under O₇.

O₉ Organic solvents released in other ways.