MALDON DISTRICT COUNCIL

PERMIT – MLD/EPR/A2/18/93

POLLUTION PREVENTION & CONTROL ACT 1999
THE ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2007

INSTALLATION ADDRESS	**Wyndeham Heron Ltd The Bentall Complex Colchester Road Heybridge Maldon Essex CM9 4NW**
CURRENT OPERATOR	**Wyndeham Heron Ltd Audley House Hove Street Hove East Sussex BN3 2DE**
PREVIOUS OPERATOR	**E T Heron and Co Ltd The Bentall Complex Colchester Road Heybridge Maldon Essex CM9 4NW**
EPR DRAFT PERMIT ISSUED	**18th August 2008**

This cover page does not form part of the permit

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Pollution Prevention & Control Act 1999
The Environmental Permitting (England and Wales) Regulations 2007

PERMIT TO OPERATE AN A2 SURFACE TREATMENT USING SOLVENTS PRINTING ACTIVITY

Wyndeham Heron Ltd, The Bentall Complex, Colchester Road, Heybridge, Maldon, Essex, CM9 4NW
Holding company's registration number: 2586277
Reference Number MLD/EPR/A2/18/93

Maldon District Council ('The Council') in accordance with Section 2 Schedule 1 of the Pollution Prevention and Control Act 1999 ('the 1999 Act') and Section 13(1) of The Environmental Permitting (England and Wales) Regulations 2007 ('the 2007 Regulations') has determined the permit for *Wyndeham Heron Ltd* ('The Operator'), whose principal place of business is

Wyndeham Heron Ltd, Audley House, Hove Street, Hove, East Sussex, BN3 2DE

and hereby permits the Operator to carry on the following activity, namely **"(a) Unless falling within Part A(1) of this Section, 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 150 kg per hour or more than 200 tonnes per year."** ("the Regulated Facility") prescribed in paragraph (a) of Part A(2) of Section 6.4 of Schedule 1 to the 2007 Regulations, at the premises occupied by the Operator at

Wyndeham Heron Ltd, The Bentall Complex, Colchester Road, Heybridge, Maldon, Essex, CM9 4NW

using those process units and plant detailed in accordance with the description summarised on page 2, subject to the conditions on pages 4-26 and located within the installation boundary shown in red within figure 2 in schedule 3 on page 30.

This permit consists of 35 pages.

Signed .....

Dave Addy, Environmental Health Officer

A person permitted to sign on behalf of the Council

Dated the XX August 2008

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Regulated Facility & Activity Description

Wyndeham Heron Ltd undertakes 'Heatset Web Offset' printing. Heatset web offset printing is on a continuous reel 'web'. It is typically used for magazines and coated papers when printing large numbers of copies. It gives richer colours than cold set printing. In heatset web offset printing the ink dries in an oven. The exhaust gases from the heatset drying process contain VOCs from inks, cleaning agents and propan-2-ol. The exhaust gases are generally abated using thermal oxidation. The activities involved with the operation are described below:

- The storage of reels of paper for printing;
- The storage of organic solvents in IBC's of 1tonne capacity;
- The storage of heatset web offset ink in three sets of 4 tanks each of 6m^3 capacity;
- The making of the printing plates using computer to plate (CTP) technology ;
- The heatset web offset printing using:
    - One Man Roland Lithoman 64 page press with a gas fired hot air oven that discharges to an integral Megtec DDIII TNV thermal oxidiser to control organic solvents emissions;
    - Three Man Roland Rotoman 32 page press with a gas fired hot air oven which discharges to an integral Megtec Summit II thermal oxidiser to control organic solvents emissions;
    - One Baker Perkins G16 32 page press with a gas fired hot air oven operating at 200-250^{o}C which discharges to the Katec thermal oxidiser;
    - One Baker Perkins G14 16 page press with a gas fired hot air oven operating at 200-250oC which discharges to the Katec thermal oxidiser;
    - The Katec TVA2012/70 thermal oxidiser controls the organic solvent emissions from the drying ovens on the Baker Perkins G16 and G14 presses before they are discharged to atmosphere;
    - One Man Roland Lithoman 72 page press with a gas fired hot air oven that discharges to an integral thermal oxidiser to control organic solvents emissions.
- The cleaning of the heatset web offset blanket using Oxidry automatic washing systems;
- Finishing operations comprising continuous lines that gather the complete magazine sets together for binding by either stitching or perfect binding using hot melt glue;
- Paper trimmings from the finishing lines are extracted to the extraction system that separates the large trimmings from the dust. The large trimmings are blown into containers and the dust is compacted into small cylindrical blocks.

Superseded Permits/Authorisations for Regulated Facility		
Holder	**Reference Number**	**Date of Original Issue**
Wyndeham Heron Ltd	MLD/PPC/18/93	April 2006
E T Heron and Co Ltd	MLD/7/1/93	January 1993

Legislation

1. The Pollution Prevention and Control Act 1999.
2. The Environmental Permitting (England and Wales) Regulations 2007, SI 3538.

Definitions

1. 'day' means any period of 24 consecutive hours commencing at midnight.
2. 'week' means any calendar week.
3. 'Operator' is defined in Regulation 7 of the 2007 Regulations.
4. 'Installation' is defined in Annex III of the 2007 Regulations.
5. 'm' means metre.
6. 'mm' means millimetre.
7. 'logbook' means a diary or book that is suitable for recording all daily information as required by this permit.
8. 'Ringelmann Shade 1' is (for the purposes of this permit) the equivalent colour of light wood smoke.
9. 'flue' includes structures and openings of any kind through or from which products of combustion may be emitted
10. 'pcb' means 'polychlorinated biphenyls'
11. 'ppm' means parts per million.

References to substances released to air are defined in The Environmental Permitting (England and Wales) Regulations 2007 Schedule 1 Part 1.

The substances are as follows:

(a) oxides of sulphur and other sulphur compounds;
(b) oxides of nitrogen and other nitrogen compounds;
(c) oxides of carbon;
(d) organic compounds and partial oxidation products;
(e) metals, metalloids and their compounds;
(f) asbestos (suspended particulate matter and fibres), glass fibres and mineral fibres;
(g) halogens and their compounds;
(h) phosphorus and its compounds;
(i) particulate matter.

Scope

The Regulated Facility comprises the whole activity including the treating, handling and storage of any materials used in and products and wastes produced by the activity.

The relevant sector guidance note for the installation – **Sector Guidance Note IPPC SG 6 Secretary of State's Guidance for the A2 Surface Treatment using Solvents Sector** – is available from the Defra website:
http://www.defra.gov.uk/environment/ppc/localauth/pubs/guidance/notes/sgnotes/pdf/sg6.pdf

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Conditions

All conditions shall have immediate effect unless stated otherwise.

Emission limits, monitoring and other provisions

1. General

1.1 Permitted Activities

1.2 The Operator is permitted to carry out the activities and associated activities specified in Table 1.

Table 1 Permitted Activities

Activity/associated activity under Schedule 1 of the Regulations	Description of specified activity	Limits of specified activity
Section 6.4 Coating Activities, Printing and Textile Treatments (Part A(2)	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 150 kg per hour or more than 200 tonnes per year	Within the boundary marked red on figure schedule 4
The storage of reels of paper for printing		Within factory building
The storage of organic solvents	in IBC's of 1 tonne capacity	Within factory building
The storage of heat set web offset ink	Three sets of 4 tanks each of 6m^3 capacity	Within factory building
The making of the printing plates	Using computer to plate (CTP) technology	Within factory building
The heat set offset printing using:	One Man Roland Lithoman 64 page press	Within enclosures in factory building
	Three Man Roland Rotoman 32 page press	Within enclosures in factory building
	One Baker Perkins G14 16 page press	Within enclosures in factory building
	One Baker Perkins G16 32 page press	Within enclosures in factory building
	One Man Roland Lithoman 72 page press	Within enclosures in factory building
The abatement of organic solvent emissions using integral thermal oxidisers on:	One Man Roland Lithoman 64 page press Three Man Roland Rotoman 32 page press One Man Roland Lithoman 72 page press	Within enclosures in factory building

The abatement of organic solvent emissions from the drying ovens using a Katec TVA 2012/70 Thermal Oxidiser	on the Baker Perkins G16 and G14 presses	Within factory building
The cleaning of the heat set web offset blanket using Oxidry automatic washing systems.		On each press
Finishing operations using Muller Martini continuous lines that gather magazine sets together for binding by either stitching or perfect binding using hot melt glue.	Corona 1, Corona 2, Norm 80, Norm 79, Tempo 1, Tempo 2, Prima 60, Prima 61, Prima 67 and Muller 335 (68)	Within finishing section of the factory
Paper trimmings from the finishing lines are extracted to the extraction system that separates the large trimmings from the dust.		Outside factory building
The large trimmings are blown into containers and the dust is compacted into briquettes.		Outside factory building

1.3 The activities permitted under condition 1.1 above shall not extend beyond the installation, being the land edged red on the drawing number 2478-00, 2478 Rep B Issue D6/5/05 referenced figure 2 in schedule 3 to this permit.

1.4 Subject to the operating conditions of this permit, the Operator shall maintain the Environmental Management System sufficient to achieve compliance with the limits and conditions of this permit.

1.5 The Operator shall complete the improvements specified in Table 11 by the dates specified in that table and send written notification of the date of completion of each requirement.

1.6 The permitted installation shall, subject to the conditions of this permit, be operated using the techniques and in the manner in the application document or as otherwise approved in writing by the Regulator.

1.7 There are no off-site conditions.

2 Emission Limits

2.1 Emissions Limits into air

2.1.1 This Part of this permit shall not apply to releases of odour, noise or vibration. Emissions to air from the emission points specified in Table 2 shall only arise from the sources specified in that Table.

Table 2 Emission points into air

Emission point reference	Source	Location of emission point
A lower	MAN 1	On roof of main factory
A upper	MAN 1	On roof of main factory
B lower	MAN 2	On roof of main factory
B upper	MAN 2	On roof of main factory
C lower	MAN 3	On roof of main factory
C upper	MAN 3	On roof of main factory
D	Lithoman 64	On roof of main factory

E	G14, G16,	On roof of main factory
F	Lithoman 72	On roof of main factory
G	Dust Extraction Plant	Side of factory

2.1.2 The limits for emissions into air of the parameters and from emission points set out in Table 3 shall not be exceeded.

Table 3 Emissions limits into air

Substance	Concentration/limits	Monitoring Frequency	Source
Volatile organic Compounds	20mg/m^3	At least once annually	A, B, C, D, E and F
Volatile organic Compounds	30% of the annual solvent input	At least once annually	Whole installation
Carbon Monoxide from abatement plant	100mg/m^3	At least once annually	A, B, C, D, E and F
Nitrogen Dioxide	100mg/m^3	At least once annually	A, B, C, D, E and F
Particulate Matter from abatement plant	100mg/m^3	At least once annually	A, B, C, D, E and F
Particulate Matter from dust plant	50mg/m^3	At least once annually	G

2.1.3 The Operator shall carry out monitoring of the parameters listed in Table 3, from the emission points and at the frequencies specified.

2.2 Emissions Limits to land

2.2.1 There shall be no emissions to land from the Permitted installation.

2.2.2 The Operator shall notify the Regulator, as soon as practicable, of any information concerning the state of the Site which affects or updates that provided to the Regulator as part of the Site Report submitted with the application for this Permit.

2.3 Emissions to water (other than emissions to sewer)

2.3.1 There shall be no emission to water from the permitted installation

2.4 Emissions to sewer

2.4.1 There shall be no emissions to the foul or storm water sewer of any substance described in List 1 and List II Groundwater Regulations 1998(S.I.1998 No.2746)).

2.4.2 Waste fount solution discharged to the sewer in Colchester Road shall not exceed 0.25m^3/hour with a maximum of 0.25m^3 in any 24 hour period as specified in Anglian Water Services consent ACH239(CO9-18)

2.5 Emissions to groundwater

2.5.1 No emission from the permitted installation shall give rise to the introduction into groundwater of any substance in List I and List II, so as to cause

pollution as defined in the Groundwater Regulations 1998 (S.I.1998 No.2746).

2.5.2 There shall be no direct emission to groundwater from the permitted installation.

2.5.3 There should be no intentional point source emissions of List I and List II substances to groundwater.

2.6 Fugitive emissions of substances to air

2.6.1 The Operator shall use the Best Available Techniques (BAT), so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the permitted installation in particular from:

- storage areas;
- buildings;
- pipes, valves and other transfer systems;
- open surfaces;

provided always that the techniques used by the Operator shall be no less effective than those described in the application, where relevant.

2.7 Fugitive emissions of substances to water and sewer

2.7.1 The Operator shall use BAT, so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water and the sewer from the permitted installation in particular from:

- all structures under or over ground;
- surfacing;
- bunding;
- storage areas;

provided always that the techniques used by the Operator shall be no less effective than those described in the application, where relevant.

2.8 Odour

2.8.1 The Operator shall use BAT, so as to prevent or where not practicable to reduce odorous emissions from the permitted installation, in particular by:

- limiting the use of odorous materials;
- restricting odorous activities;
- controlling the storage conditions of odorous materials;
- controlling processing parameters to minimise the generation of odour;
- optimising the performance of abatement systems;
- timely monitoring, inspection and maintenance;
- ensuring that the techniques used by the Operator shall be no less effective than those described in the application, where relevant.

2.8.2 Operators should conduct odour assessments to determine whether emissions result in offensive odours at or beyond the installation boundary.

2.8.3 If operations are identified as resulting in offensive odour, operators should devise an odour control programme of improvements and maintain an odour management plan.

3 Techniques for Pollution Control

3.1 Delivery, storage and handling of input (raw) materials

3.1.1 The Operator shall, subject to the conditions of this Permit, use raw materials (including water) as described in the documentation specified in Table 4, or as otherwise agreed in writing by the Regulator.

Table 4 Raw materials (including water)

Description	Parts	Date Received
Application	The response to question B 2.4 given in document 2478 Rep A Issue E Section 4 of the permit application.	20th May 2005

3.1.2 The company shall follow the quality procedures identified in the Environmental Management Plan to control the specification of raw materials used with regard to minimising any environmental impact.

3.1.3 A programme of monitoring shall be undertaken to record the consumption of inks and organic solvent against products produced to optimise the amount of organic solvent and ink used and the results reported annually to the Regulator.

3.1.4 The Operator shall ensure that all deliveries of raw materials are carried out in such a way so as to minimise noise, spillage, leaks and dusty emissions.

3.1.5 Storage areas shall be under cover and protected from the elements to avoid or minimise environmental impact, except where stored materials are in suitable weather-proof containers.

3.1.6 Storage areas shall be hard surfaced.

3.1.7 New static bulk solvent storage tanks containing solvent with a composite vapour pressure that is likely to exceed 0.4kPa at 20°c (293K) shall be fitted with pressure vacuum relief valves. The pressure vacuum relief valves shall be examined at a minimum of at least once every six months for signs of contamination, incorrect seating and should be cleaned and corrected as required.

3.1.8 Ink deliveries into the bulk storage tanks shall be supervised by the appropriately trained delivery driver, who will be responsible for avoiding potential accidents and spillage.

3.1.9 Solvent containing materials shall be stored in closed storage containers.

3.1.10 The storage, handling and use of flammable materials shall be undertaken so as to prevent accidents and limit their consequences.

3.1.11 The press manufacturer's cleaning processes shall be followed if these processes change the cleaning operations shall be reviewed and the results reported to the Regulator, to identify cleaning steps that can be eliminated. Application of cleaning organic solvents shall be from a contained device or

automatic system when applied directly on to machine rollers and dispensed by piston type dispenser or similar contained device, when used on wipes.

3.1.12 Pre-impregnated organic solvent wipes shall be held within an enclosed container prior to use.

3.2 Emissions Control

All releases to air.

3.2.1 Vents and chimneys

3.2.2 The Operator shall ensure that all operations that generate emissions to air are contained and adequately extracted to suitable abatement plant, where this is necessary to meet specified emission limits.

3.2.3 The output of the temperature monitors on the Katec Thermal Oxidation System and thermal oxidisers serving all other presses shall be continuously monitored and recorded. The monitors shall be fitted with audible and visual alarms, which shall activate if the temperature falls below 1020K (750^{o}C). Emission events that lead to the alarms being activated shall be recorded as required by condition 6.2.

3.2.4 The chimneys reference A, B, C, D, E and F shall discharge at least 15 metres above ground level.

3.2.5 All emissions into the air from:

a) the chimney stacks A, B, C, D, E and F on the attached figure 2 of Schedule 3;
b) all building openings;

shall be colourless and free from persistent mist, (other than steam or water vapour), free from droplets and free from persistent fume.

3.2.6 Dilution air shall not be admitted into the waste gases or process gases for the purpose of achieving an emission limit.

3.2.7 Emissions from combustion processes in normal operation shall be free from visible smoke and in any case do not exceed the equivalent of Ringelmann Shade 1 as described in BS 2742:1969.

3.2.8 All emissions from the seven printing presses shall pass through the integral thermal oxidisers on the presses or the Katec thermal oxidiser, prior to being exhausted to atmosphere through chimney stacks A, B, C D, E and F.

3.2.9 In the event of the failure of the integral thermal oxidisers on the presses or the Katec thermal oxidiser the presses shall not be operated.

3.2.10 The Katec thermal oxidiser and the integral thermal oxidisers on the presses shall be brought to the correct oxidisation temperature of 750^{o}C before presses are started up. The Operator shall ensure that all reasonably practicable steps are taken during start-up and shut down, and changes in combustion load in order to minimise emissions.

3.2.11 The Operator shall investigate the cause and nature of any persistent visible emissions and provide a report to the Regulator.

3.2.12 Ensure that flues and ductwork are cleaned as part of the routine maintenance programme to prevent accumulation of materials.

3.2.13 The exhaust gases discharged through any stack shall have an exit velocity greater than 15m/sec during normal operating conditions to achieve adequate dispersion.

3.2.14 Stacks shall not be fitted with any restriction at the final opening such as a plate, cap or cowl, with the exception of a cone that may be necessary to increase the exit velocity of the emissions.

3.3 Emissions to surface water and sewers

3.3.1 The Operator shall ensure that:

- All emissions are controlled, to avoid a breach of water quality standards;
- Run-off from the installation should be controlled and managed and where necessary treated before discharge in a suitable effluent treatment plant;
- All interceptors are impermeable, subject to visual inspection and any contamination removed at a frequency agreed with the Regulator and have an annual maintenance inspection; prior to inspection all contents should be removed;
- Procedures for dealing with the discharges from bunds shall be in place.

3.4 Fugitive emissions to air

3.4.1 The annual fugitive VOC emissions shall be determined in accordance with the Solvent Management Plan using the method set out in SG6 the Secretary of State's Guidance for the A2 Surface Treatment using Solvents Sector (see Appendix 1of this permit).

3.4.2 When transferring volatile liquids, the following techniques shall be employed:

- subsurface filling via filling pipes extended to the bottom of the container, the use of vapour balance lines that transfer the vapour from the container being filled to the one being emptied;
  or
- an enclosed system with extraction to suitable abatement plant where abatement is necessary to meet the emission limits.

3.4.3 Pre impregnated organic solvent wipes shall be held within a closed container prior to use.

3.4.4 Used wipes organic solvent wipes and other items contaminated with organic solvent shall be placed in a suitably labelled metal bin fitted with a self-closing lid.

3.4.5 The application of cleaning organic solvents shall be from a contained device or automatic system when applied directly.

3.4.6 Closed cleaning systems shall be used wherever possible.

3.4.7 Ductwork should be gastight to prevent fugitive loss of VOC.

3.4.8 The integrity of storage tanks shall be inspected, recorded and documented.

3.4.9 The following inspections shall be included in the maintenance schedule, recorded and documented:

- The Operator shall maintain a record of the routing of all installation drains and subsurface pipe work;
- identify all subsurface sumps and storage vessels;
- engineer systems to minimise leakages from pipes and ensure swift detection if they do occur, particularly where hazardous (i.e. listed) substances are involved;
- provide, in particular, secondary containment and/or leakage detection for such subsurface pipe work, sumps and storage vessels;
- establish an inspection and maintenance programme for all subsurface structures, e.g. pressure tests, leak tests, material thickness checks or CCTV.

3.4.10 The Operator shall ensure that all operational areas:

- have an impervious surface, spill containment kerbs, sealed construction joints, and connection to a sealed drainage system unless the Operator justifies that this is not necessary to the satisfaction of the Regulator;
- keep records of the design and condition of the surfacing of all operational areas – relevant information may include, as appropriate, capacities, thicknesses, falls, material, permeability, strength/reinforcement, and resistance to chemical attack;
- have an inspection and maintenance programme of impervious surfaces and containment kerbs;
- justify where operational areas have not been equipped with an impervious surface, spill containment kerbs, sealed construction joint, connection to a sealed drainage system.

3.4.11 The Operator shall ensure that all tanks containing liquids whose spillage could be harmful to the environment are stored in bunded areas or otherwise stored to contain any spillage.

3.4.12 The Operator shall ensure that all bunds:

- are impermeable and resistant to the stored materials;
- have no outlet (that is, no drains or taps) and drain to a blind collection point;
- have pipe work routed within bunded areas with no penetration of contained surfaces;
- are designed to catch leaks from tanks or fittings;
- should be at least 110% of the largest tank ;
- are visually inspected weekly and any contents pumped out or otherwise removed under manual control after checking for contamination;
- where not frequently inspected, are fitted with a high-level probe and an alarm as appropriate have an annual maintenance inspection (normally visual but extending to water testing where structural integrity is in doubt).

3.4.13 The Operator shall ensure that all sumps shall:

- be impermeable and resistant to stored materials;
- be subject to regular visual inspection agreed with the Regulator and any contents pumped out or otherwise removed after checking for contamination.

3.5 Odour

3.5.1 The Operator shall ensure that all storage tanks shall:

- be fitted with high-level alarms or volume indicators to warn of overfilling. The filling system shall be interlocked to the alarm system of prevent overfilling;
- have delivery connections located within a bunded area, fixed and locked when not in use;
- have their integrity inspected, recorded and documented. These inspections shall be included in the maintenance schedule.

3.5.2 Storage areas and containers shall be designed and operated to minimise the risk of fugitive releases to surface water, sewer and groundwater, in particular:

- storage areas shall be located away from watercourses and should be protected against vandalism;
- the maximum storage capacity of storage areas shall be stated and not exceeded;
- the maximum storage period for containers shall be specified;
- storage areas shall be inspected at least once a week to check for signs of leakage or potential leakage.

3.6 Operations and maintenance

3.6.1 Effective operational and maintenance systems shall be employed on all aspects of the installation whose failure could impact on the environment, in particular there shall be:

- documented operational control procedures;
- a documented preventative maintenance schedule, covering all plant whose failure could lead to impact on the environment, including major ‘non productive’ items such as tanks, pipe work, retaining walls, bunds, ducts and filters; this shall be reviewed and updated annually;
- documented procedures for monitoring emissions.

3.6.2 The key process equipment and abatement equipment shall be provided with alarms or other warning systems that indicate equipment malfunction or breakdown. Such warning systems shall be maintained and checked to ensure continued correct operation, in accordance with the manufacturer’s recommendations.

3.6.3 Essential spares and consumables shall be held on site or be available at short notice from suppliers, so that plant breakdown can be rectified rapidly.

3.6.4 Records of breakdowns shall be kept and analysed by the Operator in order to eliminate common failure modes.

3.6.5 A competent person shall be appointed to liaise with the Regulator and the public with regard to complaints. The Regulator shall be informed of the designated individual within 3 months of the issue of this permit.

4 Management

4.1 Operating techniques

4.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 5, or as otherwise agreed in writing by the Regulator.

Table 5 Operating techniques

Description	Parts	Date Received
Application	The responses to question B 2.3 given in document 2478 Rep A issue E section 3.3 of the application.	20th May 2005

4.2 Management techniques and control

4.2.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 6, or as otherwise agreed in writing by the Regulator.

Table 6 Management and control

Description	Parts	Date Received
Application	The response to question 2.1 given in Document 2478 Rep A issue E section 3.1 and 3.2 of the application	20th May 2005

4.3 Audit

4.3.1 All audit records of raw materials usage, water usage, energy usage and waste production shall be referenced to annual production.

4.4 Competence and training

4.4.1 Training systems, covering the following items, shall be in place for all relevant staff:

- awareness of the regulatory implications of the permit;
- awareness of all potential environmental impacts under normal and abnormal circumstances;
- awareness of the procedures for dealing with a breach of the permit conditions;
- prevention of accidental emissions and action to be taken when accidental emissions occur;
- awareness of all operating procedures, a working knowledge of the legal requirements and consequences of failing to comply with it and the conditions in the permit.

4.4.2 The skills and competencies necessary for key posts (which may include contractors and those purchasing equipment and materials) shall be documented and records of training needs and training received for these posts maintained and be made available when requested by the Regulator.

4.4.3 The potential environmental risks posed by the work of contractors shall be assessed and instructions provided to contractors about protecting the environment while working on site.

4.5 Raw Materials

4.5.1 The Operator shall:

- maintain an inventory covering the principal types of raw materials used;
- review alternatives for the principal types of raw materials used with regard to their environmental impact;
- have quality procedures to control the specification of raw materials used, in order to minimise any potential environmental impact;
- complete any long term studies needed into the less polluting options and make any material substitutions identified within the review period.

4.5.2 The operator should record materials usage and waste generation in order to establish internal benchmarks. Assessments should be made against internal benchmarks to maintain and improve resource efficiency.

4.5.3 Information from audits should be used to establish benchmarks. Operators should keep records of such benchmarks and make measurement against them to reveal whether the process is being maintained “in control” or to track improvements.

4.6 Waste Minimisation

4.6.1 The Operator shall carry out a waste minimisation audit at least as frequently as the review period of the permit. The methodology using process mapping, raw materials mass balance and an action plan for optimising the use of raw materials shall be submitted to the Regulator within 2 months of completion of the audit.

4.6.2 Where an audit has not been carried out in the 2 years prior to submission of the application then the first audit shall take place within 18 months of the issue of the permit.

4.6.3 Specific improvements resulting from the recommendations of audits shall be carried out within a timescale approved by the Regulator.

4.7 Water Use

4.7.1 The Operator shall carry out a water efficiency audit. Where one has not been carried out recently, an initial comprehensive audit should be carried out at the earliest opportunity, but at the latest within 2 years. Audits should be at least as frequent as the permit reviews.

4.7.2 Using this information, opportunities for reduction in water use shall be assessed and, where appropriate, shall be carried out in accordance with a timescale approved by the Regulator.

4.7.3 The volume of mains and abstracted water used in the activities shall be directly measured normally once a day, or at a frequency agreed with the regulator, when the installation is operating all measurements shall be

recorded and the records held on site and be available to the Regulator when requested.

4.8 Operating Techniques

4.8.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 7, or as otherwise agreed in writing by the Regulator.

Table 7 Operating techniques		
Description	**Parts**	**Date Received**
Application	The responses to question B 2.3 given in document 2478 Rep A issue E section 3.3 of the application.	20TH May 2005

4.9 Waste Management

4.9.1 The Operator shall, subject to the conditions of this Permit, handle and store waste as described in the documentation specified in Table 8, or as otherwise agreed in writing by the Regulator.

4.9.2 Waste materials specified in Table 8 shall only be stored on the site in the location and manner specified in that Table.

Table 8 Waste stored on site		
Description of Waste	**Location of Storage on Site**	**Manner of Storage**
Used plates	Non ferrous metal skip	In skip
Spent developer and fixer	Tank IBC 1	Piped to IBC
Scrap paper from printing	Recycled paper skip	In skip
Scrap paper from finishing	Recycled paper skip	In skip
Cores	Recycled paper skip	In skip
Waste fount solution	To sewer	
Waste blanket wash	Tank (IBC) 2	Sealed container
Solvent soaked wipes	Wipes Bin	Sealed Container
Paper trimmings	Compactor	Sealed container
Perfect binder dust	Compactor and compacted dust skip	
Waste plastic wrap	General waste skip	In skip

4.9.3 The Operator shall:

- record the quantity, nature, origin and where relevant, the destination, frequency of collection, mode of transport and treatment method of any waste which is disposed of or recovered;
- ensure that waste storage areas are clearly marked and signed, and that containers are clearly labelled;
- ensure that appropriate storage facilities are provided for substances that are flammable, sensitive to heat or light etc, and that incompatible waste types are kept separate;
- ensure that containers are stored with lids, caps and valves secured and in place (this also applies to emptied containers);

- ensure that procedures are in place to deal with damaged or leaking containers;
- segregate waste wherever practicable;
- identify the disposal route for all waste, which should be as close to the point of production as possible.

4.9.4 All organic solvent contaminated waste shall be stored within closed containers.

4.9.5 Prior to removal from site, used wipes and other items contaminated with organic solvent shall be placed in a suitably labelled bin fitted with a closing lid.

4.9.6 Dusty wastes shall be stored in closed containers and handled in a manner that avoids emissions or otherwise treated so that dust is suppressed and handled in a manner that avoids emissions.

4.9.7 The Operator shall carry out an annual review to demonstrate that the best environmental options are being used for dealing with all waste from the installation.

4.9.8 Records shall be maintained of any waste sent off site, and these records shall be made available to the Regulator at all times.

4.10 Waste recovery and disposal

4.10.1 The Operator shall subject to the conditions of this permit, recover and dispose of waste as described in Table 8 or as otherwise agreed in writing with the Regulator.

4.10.2 The Operator should carry out an annual review to demonstrate that the best environmental options are being used for dealing with the waste streams listed in Table 8.

4.10.3 At a minimum of every two years, the operator should investigate potential markets for the recovery/re-use of wastes that are currently disposed of to landfill.

4.11 Energy Efficiency

4.11.1 The Operator shall produce a report annually on the energy consumption of the installation and submit it to the Regulator.

4.11.2 In order to optimise combustion, the Operator shall, where monitor carbon monoxide and oxygen in waste gases.

4.11.3 The Operator shall ensure that all plant is operated and maintained to optimise the use of energy and to minimise the loss of energy.

4.11.4 The Operator shall ensure that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss.

4.12 Energy efficiency techniques

4.12.1 The following techniques shall be considered:

- heat recovery from different parts of the processes;
- minimisation of water use and closed circulating water systems;
- good insulation;
- plant layout to reduce pumping distances;
- phase optimisation of electronic control motors;
- optimised efficiency measures for combustion plant;
- preventative maintenance programme targeting energy drops.

4.13 Energy supply techniques

4.13.1 The following techniques shall be considered:

- use of Combined Heat and Power (CHP);
- generation of energy from waste;
- use of less polluting fuels.

4.14 Accident prevention and control/incidents/non conformance affecting the Environment

4.14.1 The Operator shall, subject to the conditions of this Permit, prevent and limit the consequences of accidents that may have an adverse effect on the environment as described in the documentation specified in Table 9, or as otherwise agreed in writing by the Regulator.

Table 9 Accident prevention and control

Description	Parts	Date Received
Application	The response to question B 2.8 given in document 2478 Rep A issue E section 7 of the application.	20th May 2005

4.14.2 There shall be written procedures for investigating incidents and near misses that may have an adverse effect on the environment, including identifying suitable corrective action and following up.

4.14.3 The Operator shall maintain an environmental accident management plan that identifies the hazards, assesses the risks and identifies the measures required to reduce the risk of potential events or failures that might lead to an environmental impact. The plan shall identify:

- the actions to be taken to minimise these potential occurrences;

and

- the actions to deal with such occurrences so as to limit their consequences.

4.14.4 In the case of abnormal emissions arising from an accident, such as a spillage for example, the Operator shall:

- investigate immediately and undertake remedial action as soon as practicable;
- promptly record the events and actions taken;

- ensure the regulator is made aware, as soon as practicable.

4.14.5 Suitable solvent containment and spillage equipment shall be readily available in all solvent handling areas.

4.14.6 Adequate provision to contain potential liquid and solid spillage shall be provided.

4.14.7 Appropriate precautions shall be taken to prevent ignition of flammable materials.

4.14.8 All spillages shall be cleared as soon as possible; dry sweeping of dusty spillages shall not be permitted.

4.14.9 The handling and use of flammable and explosive materials shall be carried out in accordance with the requirements of the Dangerous Substances and Explosive Atmosphere Regulations SI2776 2002.

4.14.10 Areas where flammable organic solvents and organic solvent containing materials are handled or used shall be suitably contained to minimise the potential spread for fire.

4.14.11 Operations working at above 25% of the organic solvent Lower Explosive Limit (LEL) must be controlled using suitable monitoring and control devices.

4.14.12 The auto-ignition temperature shall not be exceeded in any organic solvent containing section of the process, with the exception of the combustion chamber of the Thermal Oxidiser abatement plant.

4.14.13 Controlled shutdown procedures shall be in place for dealing with emergency such as organic solvent levels entering the combustion plant at greater than 25% Lower Explosive Limit (LEL).

4.14.14 The storage, handling and use of flammable materials shall be undertaken so as to prevent accidents that may have an adverse impact on the environment and limit their consequences.

4.15 Noise and vibration

4.15.1 A Noise Management Plan shall be maintained by the Operator in a form agreed with the Regulator. The Plan shall be reviewed regularly and updated as necessary, in particular it shall include:

- Within 6 months a review of the applicability of fitting ‘Broadband Reversing Alarms’ to the vehicles belonging to the Operator and vehicles making regular deliveries to the site.

4.15.2 The rating level of noise from the installation shall not exceed the levels set out below. The levels to be measured at the nearest boundary of the listed noise sensitive premises. The measurements shall be made in accordance with the provisions of BS4142:1997. This condition shall apply immediately.

Location Site Boundary	Noise level $LA_{eq(1\ hour)}$ dB 07:00 to 22:00	Noise level $LA_{eq(5\ minute)}$ dB 22:00 to 07:00	Compliance Date
Springfield Cottages	50	40	Immediately
The Roothings	50	45	Immediately
Hilary Close	50	45	Immediately
Boulton Cottages	50	45	Immediately

4.15.3 Any single noise event noise shall not exceed 73 LA_{max}(fast) between 22.00 and 07.00 hours Monday to Friday, Saturday after 13:00 hours and on Sundays and Public Holidays. The levels to be measured at the nearest boundary of any noise sensitive premises. This condition shall apply immediately.

4.15.4 Noise from the installation shall be controlled in accordance with the Noise Management Plan.

4.15.5 The noise levels from all chimneys, ventilation openings, fans, pumps, compressors, electric motors, ventilation openings, front-end loaders and fork lift trucks and any other plant and equipment shall be monitored and where necessary controls shall be put in place to reduce noise levels to those agreed with the Regulator.

4.15.6 Noise levels from the installation shall be subjectively monitored at specified locations around the installation boundary whilst the installation is in operation to ensure compliance with the Noise Management Plan and the results recorded as required by condition 4.16.2. This shall be carried out once a week in the period 07:00 to 22:00 and once during the period 22:00 to 07:00.

4.15.7 Noise levels from the installation shall be quantitatively monitored at the locations listed in 4.15.2 on two occasions during each year to demonstrate compliance with conditions 4.15.2 and 4.15.3 and a report shall be sent to the Regulator within 8 weeks of the completion of the monitoring.

4.15.8 The Operator shall employ basic good practice measures for the control of noise, in particular:

- identification of key plant and equipment with the potential to give rise to noise nuisance;
- documented maintenance systems for the identified key plant and equipment;
- to restrict lorry movements and prevent manoeuvring of vehicles further up the site near The Roothings and to ensure that there is proper management of the one way system.

4.15.9 No vehicle shall have its engine running or idling for more than five minutes in any part of the open area of the installation between 22:00 hours and 07:00 hours, or before 09:00 hours on Sunday mornings, except in the agreed area shown marked red on the attached figure 2 in schedule 3.

4.15.10 There shall be no skip changing or movement between 21:00 hours and 08:00 hours and not before 09:00 hours on Sundays unless carried out in the sound proof building.

4.15.11 Until the completion of the new warehouse, there shall be no noise audible at noise sensitive premises between the hours of 21:00 and 07:00 from:

- the loading/unloading of paper, paper reels & skips;
- the external transfer of paper, paper reels, goods and skips around the installation;
- the sounding of warning alarms from the reversing of vehicles;
- noise from inside the premises shall only be emitted be through attenuated ducting and materials and access/egress to the site.

4.15.12 After the completion of the new warehouse, there shall be no noise audible at noise sensitive premises at any time from:

- the loading/unloading of paper, paper reels & skips;
- the external transfer of paper, paper reels, goods and skips around the installation;
- the external sounding of warning alarms from the reversing of vehicles around the installation;
- noise from inside the premises shall only be emitted through attenuated ducting and materials and access/egress to the site.

4.16 Monitoring and Reporting

4.16.1 The Operator shall carry out, evaluate and assess monitoring subject to the conditions of this Permit, or otherwise agreed in writing by the Regulator.

4.16.2 The Operator shall monitor emissions, make tests and inspections of the process and keep records, in particular the Operator shall keep records of audits, inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. Monitoring may include process variables and operating conditions where relevant to emissions.

4.16.3 The current records shall be kept on site and be made available for inspection by the Regulator. The records shall be kept by the Operator for at least two years

4.16.4 The Regulator shall be informed of monitoring to be carried out and the results. The results shall include process conditions at the time of monitoring.

4.16.5 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

4.16.6 The results of non-continuous emission testing shall be forwarded to the regulator within 8 weeks of the completion of the sampling.

4.16.7 Adverse results from both continuous and non-continuous monitoring shall be investigated immediately.

4.16.8 The Operator shall ensure that:

- the cause of adverse results has been identified and corrective action taken;

- as much detail as possible is recorded regarding the cause and extent of the problem and the action taken to rectify the situation;
- re-testing to demonstrate compliance is carried out as soon as possible; and
- the Regulator is notified.

4.16.9 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions:

- investigation and remedial action shall be undertaken immediately;
- the process or activity shall be adjusted to minimise those emissions; and
- the events and actions taken shall be promptly recorded;
- in the case of non-compliance causing immediate danger to human health, operation of the activity shall be suspended.

4.16.10 The Regulator shall be informed without delay:

- if there is an emission that is likely to have an effect on the local community;
- in the event of the failure of key abatement plant;
- if continuous monitoring shows an emission concentration exceeding double the limit value.

4.16.11 The design and location of sampling systems shall be designed and located in order to obtain representative samples for all release points.

4.16.12 Sampling points on new plant shall be designed to comply with the British or equivalent standards e.g. BS ISO 9096: 2003, BS EN 13284-1 or BS ISO 12141:2002 for sampling particulate matter in stacks.

4.16.13 The Operator shall ensure that adequate facilities for sampling are provided on stacks or ducts

4.16.14 All results submitted to the regulator should include details of process conditions at the time of monitoring, monitoring uncertainty as well as any deviations from the procedural requirements of standard reference methods and the error invoked from such deviations.

4.16.15 The continuous monitoring required by conditions in this permit it shall be carried out as follows:

- all continuous monitoring readings shall be on display to appropriately trained operating staff;
- instruments shall be fitted with audible and visual alarms, situated appropriately to warn the Operator of arrestment plant failure or malfunction;
- the activation of alarms shall be automatically recorded;
- all continuous monitors shall be operated, maintained and calibrated (or referenced) in accordance with the manufacturers' instructions, which should be made available for inspection by the Regulator. The relevant maintenance and calibration (or referencing) should be recorded;
- all new continuous monitoring equipment shall be designed for less than 5% downtime over any 3-month period.

4.17 Monitoring and reporting of emissions to air

4.17.1 Exhaust flow rates of waste gases shall be consistent with the efficient capture of emissions, good operating practice and meeting the requirements of the legislation relating to the workplace environment.

4.17.2 The introduction of dilution air to achieve emission concentration limits shall not be permitted.

4.17.3 Calibration and compliance monitoring shall meet the following provisions as appropriate. No result shall exceed the emission concentration limits specified, except where either:

(a) data is obtained over at least 5 sampling hours in increments of 15 minutes or less; or
(b) at least 20 results are obtained where sampling time increments of more than 15 minute are involved; and in the case of (a) or (b)
(c) no daily mean of all 15-minute mean emission concentrations should exceed the specified emission concentration limits during normal operation (excluding start-up and shut-down);
and
(d) no 15-minute mean emission concentration should exceed twice the specified emission concentration limits during normal operation (excluding start-up and shut-down).

4.17.4 The oxidisation temperature of the Katec Thermal Oxidation System and the thermal oxidisers serving the Lithoman 64, Lithoman 72, Rotoman 1, 2, 3, Baker Perkins G16 and G14 presses shall be continuous monitored and recorded.

4.17.5 Emissions of VOC, carbon monoxide and nitrogen oxides (expressed as nitrogen dioxide) from the stacks serving the Katec Thermal Oxidation System and the thermal oxidisers serving the Lithoman 64, Lithoman 72, Rotoman 1, 2, 3, Baker Perkins G16 and G14 presses shall be quantitatively monitored, at least once in a 12 month period.

4.17.6 Emissions from the particulate matter arrestment plant referenced G on the attached figure 2 in Schedule 3 shall be quantitatively monitored, at least once in a 12 month period.

4.17.7 Emissions from the particulate matter arrestment plant shall be continuously indicatively monitored and recorded so as to demonstrate that it performance is satisfactory.

4.17.8 There shall be provided:

- Safe and adequate means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in figure 2 in schedule 3;

and

- Safe and adequate means of access to other sampling/monitoring points when required by the Regulator.

4.17.9 Daily visual and olfactory assessments of releases shall be undertaken to ensure that all final releases to air shall be essentially colourless, free from

persistent trailing mist or fume, free from droplets and free from offensive odour. A record of any abnormal emission shall be kept as required by condition 4.16.9.

4.18 Monitoring and reporting emissions to water and sewer

4.18.1 Copies of any monitoring reports required by Anglian Water shall be sent to the Maldon District Council.

4.18.2 The appropriateness of the monitoring requirements will vary depending upon the sensitivity of the receiving water and should be proportionate to the scale of the operations, nature of the discharge and receiving water. For each release point the following information is required:

- the specific volume flow from the process to sewer/controlled water;
- the sensitivity of the receiving water;
- the volume of discharge compared to the percentage dry river flow of the receiving water.

4.19 Monitoring and reporting of waste

4.19.1 The following should be monitored and recorded:

- Quantity nature and origin of the waste;
- the physical description of the waste;
- a description of the composition of the waste;
- any relevant hazardous properties (hazard and risk phrases);
- European Waste Catalogue code;
- Handling precautions and substances with which it cannot be mixed;
- Disposal routes for each waste category.

4.20 Monitoring of VOC

4.20.1 The annual solvent consumption shall be determined in accordance with the Solvent Management Plan using the method set out in Appendix 2 the SG6 the Secretary of State's Guidance for the A2 Surface Treatment using Solvents Sector (See Appendix 1of this permit).

4.20.2 The Solvent Management Plan shall be used for determining the fugitive emissions. Once completed, it need not be repeated until the equipment is modified.

4.20.3 The Solvent Management Plan shall be used to demonstrate compliance with the VOC emission limits in condition 2.1.2 and table 3 annually.

5 Decommissioning

5.1 The Operator shall, subject to the conditions of this Permit, make provision for decommissioning the installation as described in the documentation specified in Table 10, or as otherwise agreed in writing by the Regulator.

Table 10 Decommissioning		
Description	**Parts**	**Date Received**
Application	The response to question B 2.11 in document 2478 Rep A issue E section12 of the application.	20th May 2005

5.2 A site closure plan, setting out the steps to be taken on cessation of installation activities shall be submitted to and approved by the Regulator. The plan should be reviewed and updated annually.

6 Records

6.1 All records or other documents required by this permit and any other records made by the Operator in relation to the operation of the Permitted Installation shall:

- be made available for inspection by the Regulator at any reasonable time;
- be supplied to the Regulator on demand and without charge;
- be legible;
- be made as soon as reasonably practicable;
- indicate any amendments which have been made and shall include the original record wherever possible; and
- be retained for a minimum period of 2 years from the date when the records were made.

6.2 The Operator shall keep a record of:

- Any malfunction, breakdown or failure of plant, equipment or techniques (including down time and any short term and long term remedial measures) that may have, has had or might have had a significant effect on the environmental performance of the Regulated Facility. These records shall be kept in a log maintained for that purpose;
- all monitoring and sampling taken or carried out and any assessment or evaluation made on the basis of such data;
- complaints concerning the Installation's effect or alleged effect on the environment. The record shall give the date of complaint, time of complaint, a summary of any investigation and the results of such investigation.

7 Reporting

7.1 All reports shall be sent to the Regulator at the address notified in writing to the Operator by not later than 31 January in each year or the date agreed in writing with the Regulator.

7.2 The results obtained under conditions 3.1.3, 3.2.11, 4.6.1, 4.7.1, 4.11.1, 4.15.7, 4.16.6, 4.18.1 and 4.20.1 and any assessments made of such data shall be reported to the Regulator.

7.3 Reports mentioned under condition 7.1 and 7.2 shall include:

- the data in respect of the parameters and emission points specified in table 12 in Schedule 2;
- be made for the reporting periods specified in conditions 3.1.3, 3.2.11, 4.6.1, 4.7.1, 4.11.1, 4.15.7, 4.16.6, 4.18.1 and 4.20.1;

- Not later than 31 January in each year, the Operator shall provide a summary report of the previous year's progress against the annual improvement targets in their Environmental Management System;
- Reports shall be sent to the Regulator within 28 days of the end of the reporting period.

7.4 The Operator shall:

- Maintain a record of the calculations, estimations and assumptions made in determining the annual emissions reported in condition 7.3. This record shall be retained for a period not less than 4 years.

8 Notifications

8.1 The Operator shall notify the Regulator without delay of:

- the detection of an emission of any substance which exceeds any limit or criteria in this permit specified in relation to the substance;
- the detection of any fugitive emission that has caused or may cause significant pollution unless the quantity emitted is so trivial that it would be incapable of causing pollution;
- the detection of any malfunction, breakdown or failure of plant or techniques which has caused or may have the potential to cause significant pollution; and
- any accident which has caused or may have the potential to cause significant pollution.

8.2 The Operator shall submit written confirmation to the Regulator of any notification under condition 8.1 in accordance with Schedule 1 to this Permit, by sending the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification. The Operator shall send the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;

8.3 The Operator shall give written notification as soon as practicable, of any of the following:

- permanent cessation of the operation of any part of or all of the Regulated Facility;
- cessation of the operation of any part of or all of the Regulated Facility for a period, likely to exceed 1 year; and
- resumption of the operation of any part of or all of the Regulated Facility after a cessation notified under 8.3.

8.4 The Operator shall notify the following matters to the Regulator, in writing, within 14 days of their occurrence:

- any change in the Operator's trading name, registered name or registered office address;
- a change to any particulars of the Operator's ultimate holding company (including details of an ultimate holding company where the Operator has become a subsidiary);
- 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 has entered into a Climate Change Agreement with the Government, the Operator shall notify the Regulator within one month of:

- a decision by the Secretary of State not to re-certify that Agreement;
- a decision by either the Operator or the Secretary of State to terminate that agreement;
- any subsequent decision by the Secretary of State to re-certify such an Agreement.

9 Improvement programme

9.1 The Operator shall complete the requirements specified in Table 11 by the dates specified in that table, and shall send written notification of the date of completion of each requirement to the Regulator, at the Reporting Address, within 14 days of the completion of each such requirement.

Table 11 Improvement programme requirements

Reference	Requirement	Date
IP1	Stack heights shall be increased to greater than Wyndeham Heron's calculated D1 'required stack height'. **OR** the 'e-flux velocity' of emissions shall be increased in order to reduce the required stack height.	6 months from permit issue
IP2	'Broadband Reversing Alarms' applicability review – see permit condition 4.15.1	1st October 2008
IP3	Odour Assessments – see permit condition 2.8.2	6 months from permit issue
IP4	Odour Control – see permit condition 2.8.3	6 months from permit issue
IP5	Recycling Markets – see permit condition 4.10.2	6 months from permit issue

10 Environmental Permitting Regime Conditions

10.1 The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit.

10.2 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.

10.3 The authority must be notified without delay of any incident or accident significantly affecting the environment.

10.4 You must respond to any Information Notice served on you for the purposes of complying with your obligation to report your pollutant releases and off-site waste transfers pursuant to the directly applicable EU duty in accordance with Article 5 of EC Regulation No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. As a permit condition, your failure to respond in accordance with such annual E-PRTR Information Notice will hereby constitute a breach of your permit.

Schedule 1

Confirmation of condition 8.1 notifications, in accordance with condition 8.2

This Schedule outlines the information that the Operator must provide to the Regulator to satisfy condition 8.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements must be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and permitted 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 2007 Regulations.

Returns should contain:

Part A
☐ Name of Operator
☐ Permit reference
☐ Location of Installation
☐ Date information provided
☐ Time, date and location of the emission
☐ Identity and details of the substance[s] emitted to include:
☐ Best estimate of the quantity or the rate of emission, and the time during which the emission took place
☐ Environmental medium into which the emission took place
☐ Measures taken, or intended to be taken, to stop the emission

Part B
☐ Any more accurate information on the matters notified 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 or harm which has been or may be caused by the emission
☐ The dates of any Part A notifications within in the previous 24 months

☐ Name ☐ Post…..

☐ Signature ☐ Date

☐ Statement that signatory is authorised to sign on behalf of Wyndeham Heron Ltd.

Schedule 2

Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 7.1-7.4 of this Permit, are listed below.

Table 12 Reporting of Monitoring Data			
Parameter	**Emission point**	**Reporting period**	**Period begins**
Volatile Organic Compounds	A, B, C, D,E and F	Annually	Date of the signing of the permit
Nitrogen dioxide	A, B, C, D,E and F	Annually	Date of the signing of the permit
Carbon monoxide	A, B, C, D, E and F	Annually	Date of the signing of the permit
Particulate Matter	A, B, C, D, E and F	Annually	Date of the signing of the permit
Particulate Matter	G	Annually	Date of the signing of the permit

Schedule 3

Plans of Installation

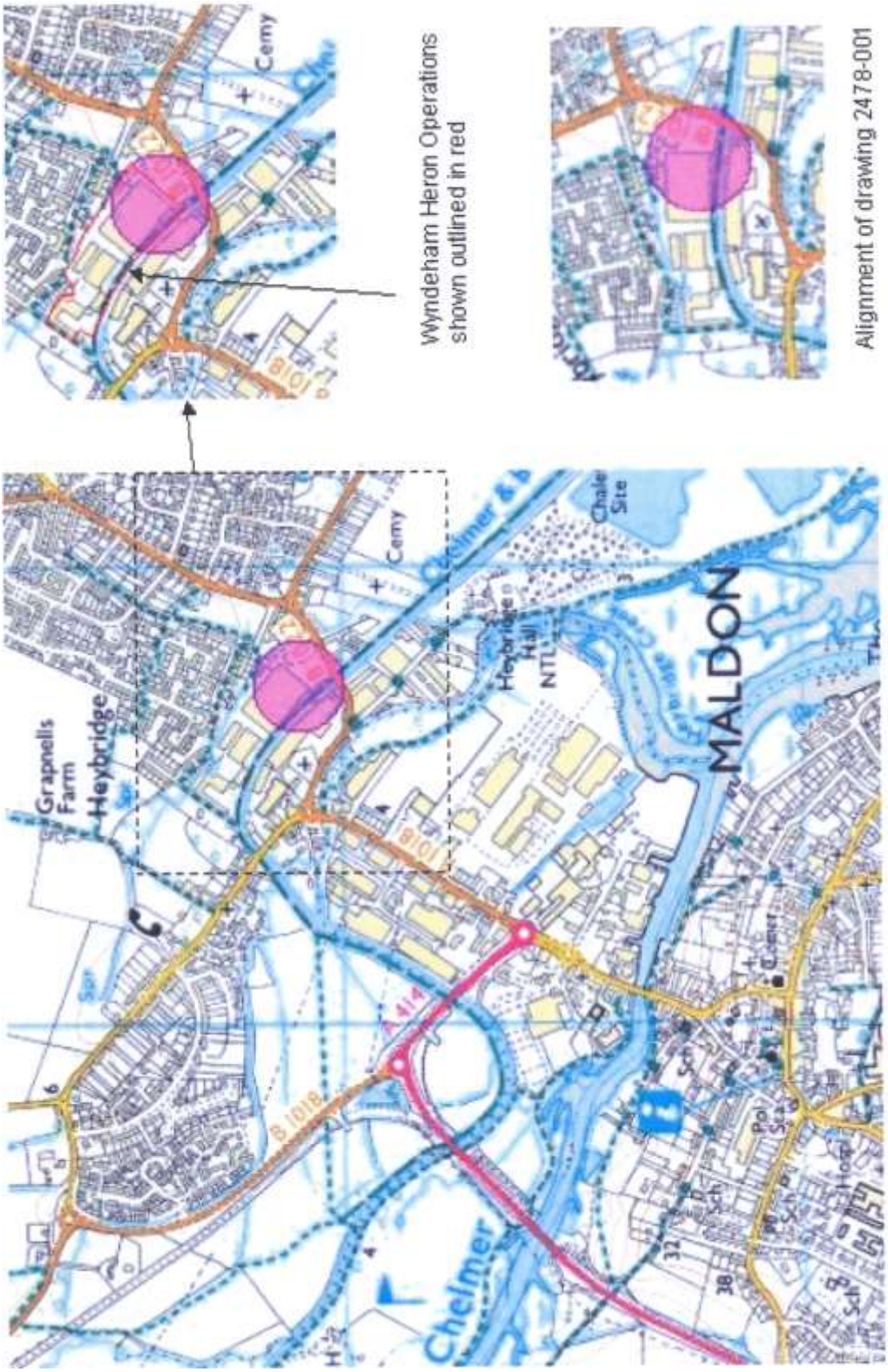

Figure 1 Wyndeham Heron Location Map

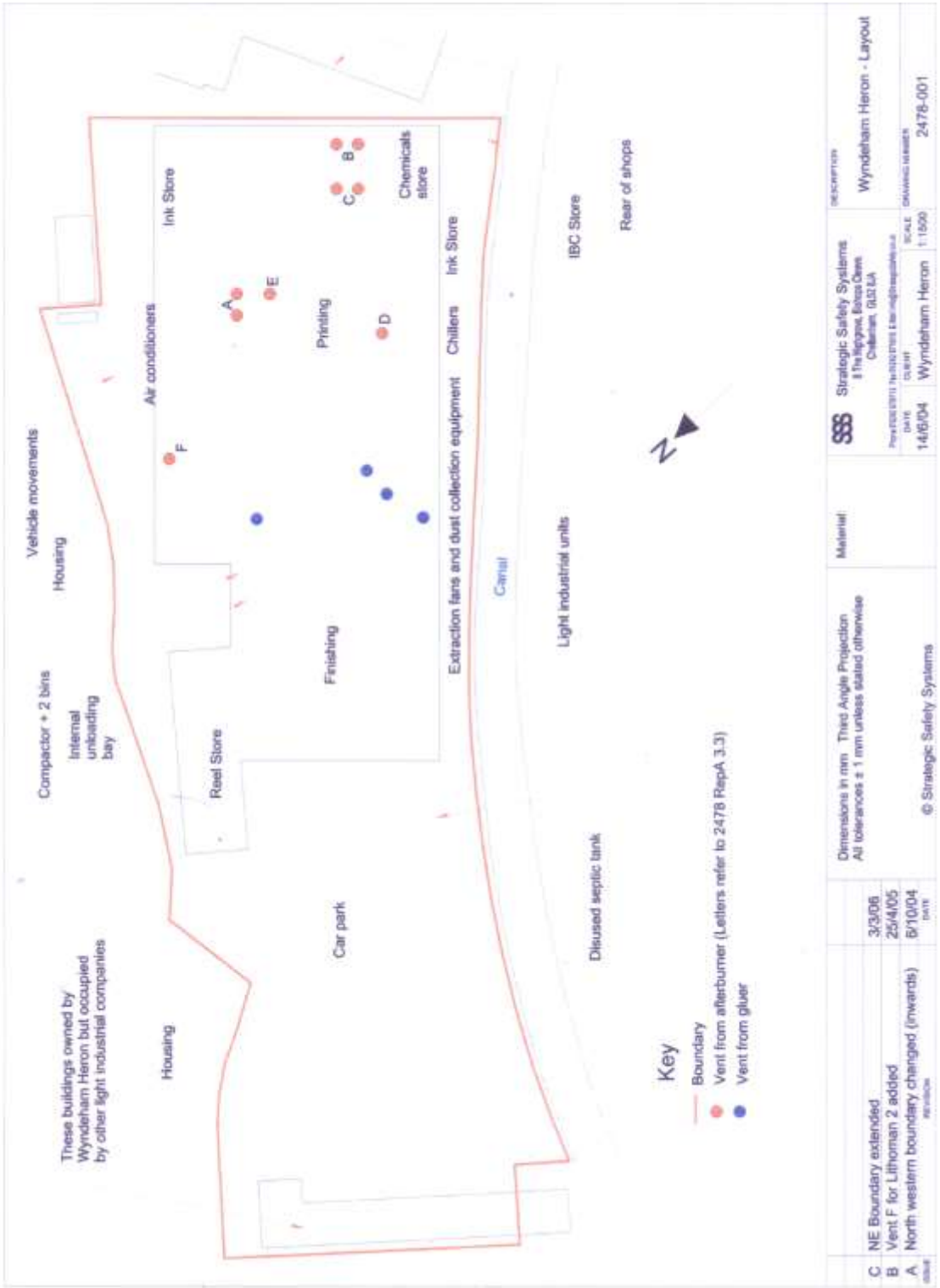

Figure 2 Wyndeham Heron Layout – drawing number 2478-001

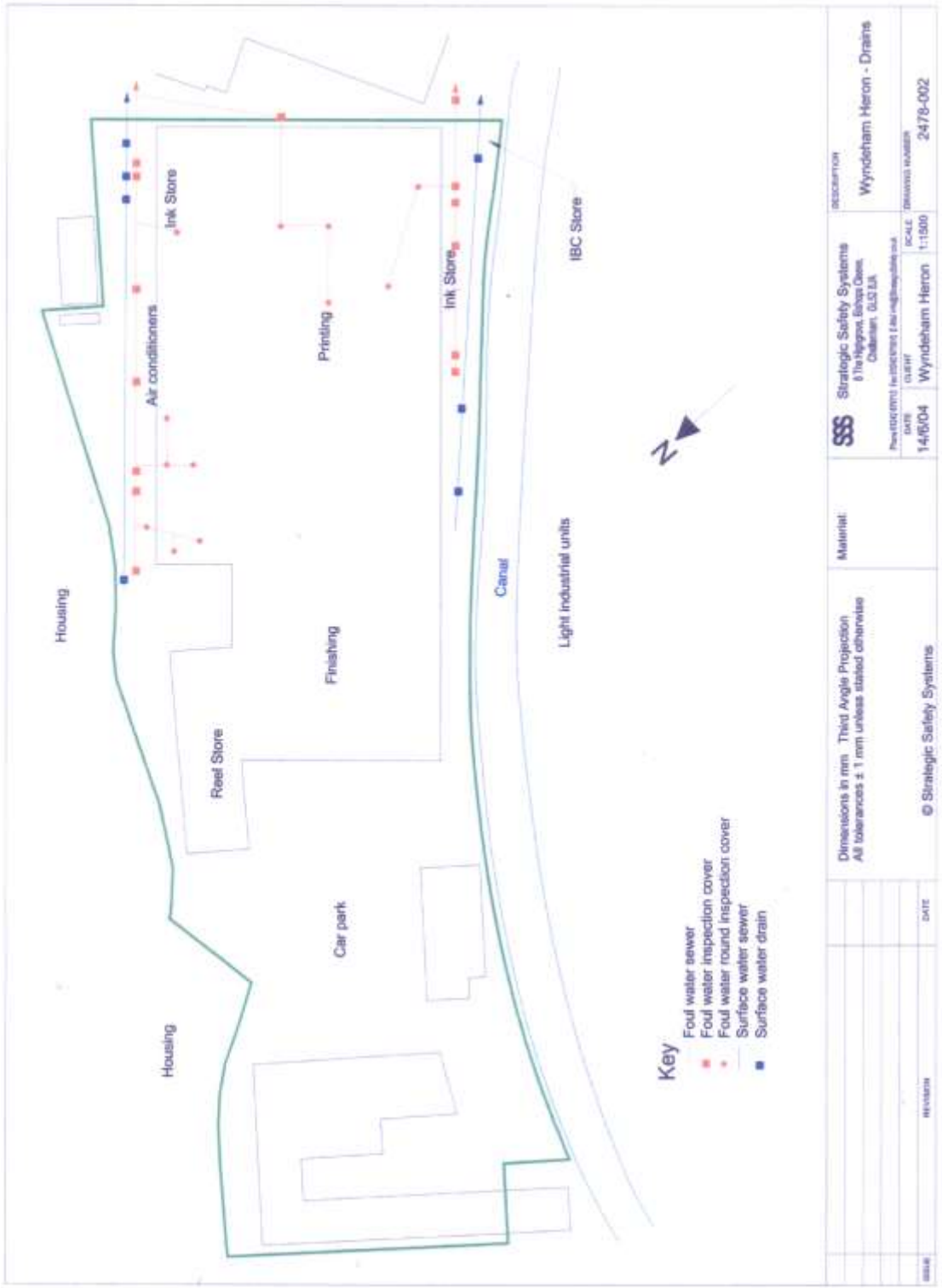

Figure 3 Wyndeham Heron Drains – drawing number 2478-002

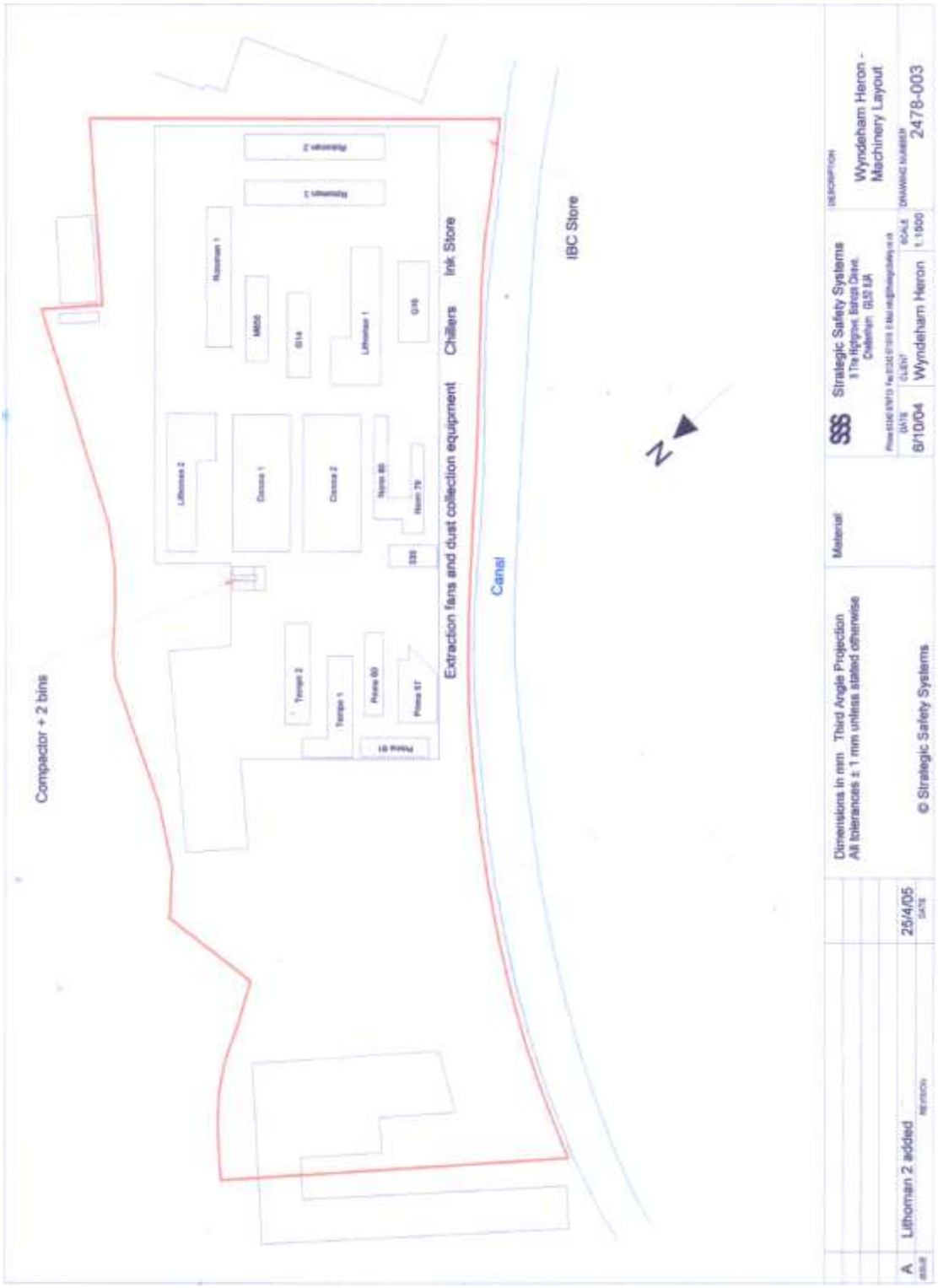

Figure 4 Wyndeham Heron Machinery Layout – drawing number 2478-003

Appendix 1

Solvent Management Plan Definitions:

The following definitions provide a framework for the mass balance calculations used in determining compliance with the requirements of the Solvent Management Plan and the Reduction Scheme.

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 preparations purchased which are used as input into the process/activity (including cleaning solvents).

I2 The quantity of organic solvents or their quantity in preparations 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 preparations, which are sold or are intended to be sold as a commercially valuable product.

O8 Organic solvents contained in preparations '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.

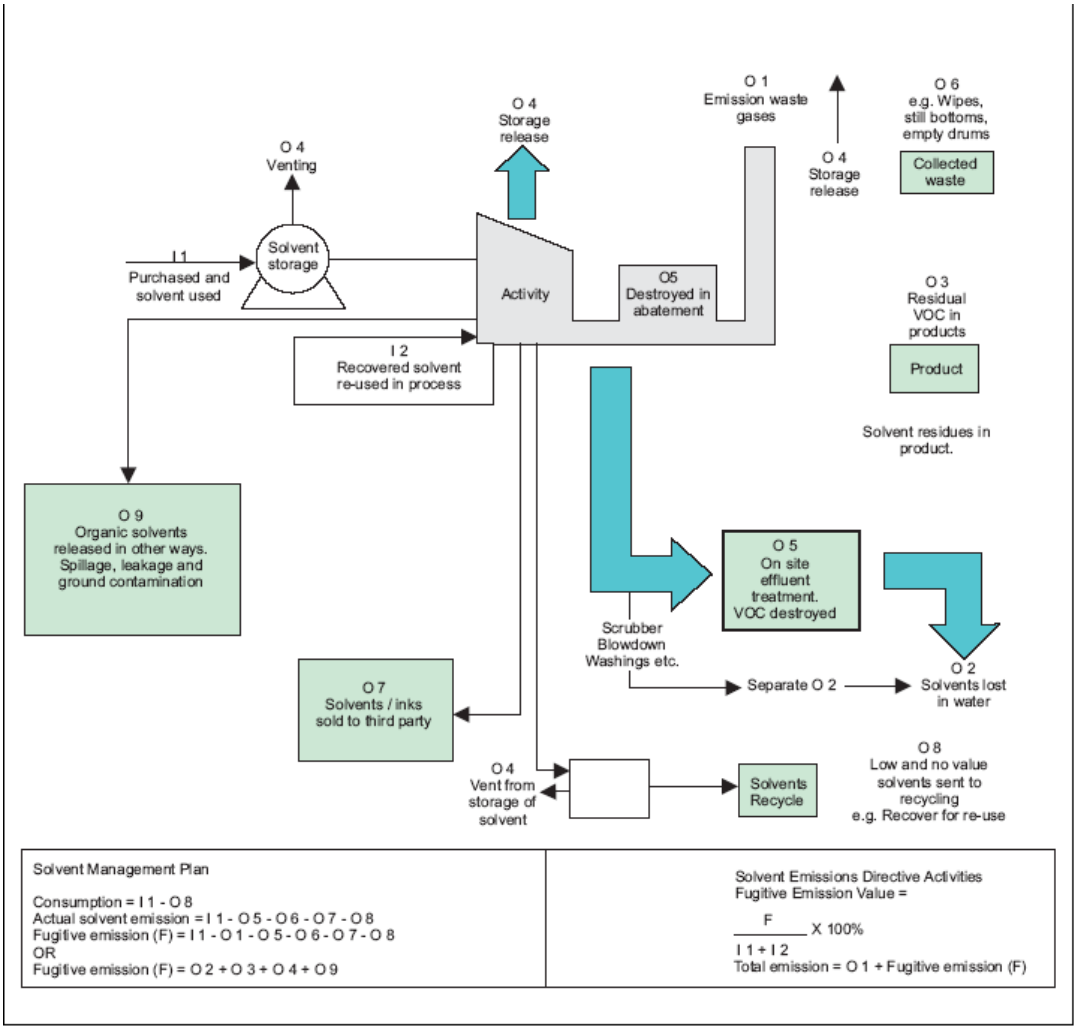

Figure 5 Solvent Management Plan

Determination of Consumption

Consumption(**C**): means the total input of organic solvents into an installation in the last calendar year, or previous 12-month period (**I1**), less any VOC that are recovered for reuse (**O8**).

The total mass of Solvent Inputs and Outputs must be determined and submitted to the regulator annually, preferably to coincide with the Operators stocktaking requirements, in the form of a mass balance in order to determine the annual actual consumption of solvent.

Where: C= I1- O8

I1 Total quantity of organic solvents, or their quantity in preparations purchased which are used as input into the process/activity. A calculation of the purchased Solvent Input (**I1**) to the process/activity, is carried out by recording:

The mass of solvent contained in inks, coatings, diluents and cleaners in the initial stock (**IS**)at the start of the accounting period, plus:

The mass of solvent contained in inks, coatings, diluents and cleaners in the purchased stock (**PS**) during the accounting period.

Minus The mass of solvent contained in inks, coatings, diluents and cleaners in the final stock (**FS**) at the end of the accounting period.

Total Solvent Input (I1) = IS + PS – FS

Determination fugitive VOC emissions

To demonstrate compliance with fugitive emission values in Section 2 the Operator must determine the fugitive emissions (F) from the installation using the following:

F = I1 -O1 -O5 -O6 -O7 -O8
or:
F=O2+O3+O4+O9

This quantity can be determined by direct measurement of the quantities. Alternatively, an equivalent calculation can be made by other means, for instance by using the capture efficiency of the process. The Fugitive Emission value as a percentage of the Solvent Input (**I**) is determined by:

Fugitive Emission Value = 100 x F/I

Where the Solvent Input **(I) = I1+ I2** (determined as part of the Solvent Management Plan).

Fugitive emission values must be determined for each installation, once completed, it need not be repeated until the equipment is modified.

END OF PERMIT

SUPPLEMENTARY NOTES

These notes do not comprise part of Permit MLD/EPR/A2/18/93 but contain guidance relevant to the Permit.

Interpretations and Definitions Notes
In relation to this Permit, the following expressions shall have the following meanings:

Activity	An activity listed in Part 2 of Schedule 1 to the EP Regulations which will form part of an EP installation or be a mobile plant
Air	Includes air within buildings and air within any other natural or man-made structures above and below ground (section 1(2) of the PPC Act 1999)
Appeal	The opportunity provided for the Operator to dispute certain actions or decisions by the local authority, by appealing to the Secretary of State/Welsh Ministers – see Chapter 30
Application	A submission made by an Operator to a local authority to seek the grant of a permit (see Chapters 5 and 7), surrender of a permit (see Chapters 18 and 19), variation of the conditions of a permit (see Chapter 24) or transfer of a permit (see Chapter 25)
Available Techniques	In connection with BAT, those techniques developed on a scale which allow implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator (see Chapter 12 and Annex VIII)
BAT	The main basis for determining standards under the EP Regulations, and defined as the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for ELVs designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole – see Chapter 12 plus separate definitions for Best, Available and Techniques (Chapter 12 and Annex VIII)
Best	In relation to 'techniques' in BAT, the most effective in achieving a high general level of protection of the environment as a whole (Chapter 12 and Annex VIII)
BREF Notes	BAT Reference Notes – documents – typically of some 500 pages or more - published by the European Commission which follow from an exchange of information on BAT between the Member States – see Chapter 12 of the Manual and http://eippcb.jrc.es/
Capacity	See Annex III
Change in Operation	In relation to an installation or mobile plant, a change in its nature or functioning or an extension which may have consequences for the environment – see Chapter 24 of the Manual

COMAH	Control of Major Accident Hazards – the subject of an EC Directive and domestic Regulations applicable to industrial sites, some of which will also fall under IPPC – see Chapter 20
Commercial confidentiality	An Operator may request certain information in relation to a LA-IPPC or LAPPC permit to remain confidential for commercial reasons, i.e. not be placed on the public register. The onus is on the Operator to provide a clear justification for each item he or she wishes to be kept from the register. The exceptions are very limited where information relates to emissions – see Chapter 8
Contaminated land	Land determined to be contaminated under Part IIA of the Environmental Protection Act 1990 – see Chapter 18
Determination	The process by which a local authority decides whether or not to grant the request sought by an Operator in an application, for example by issuing a permit with appropriate conditions or by refusing the permit – see Chapters 6 and 7
Enforcement notice	A notice served by a local authority to enforce compliance with the permit conditions or require remediation of any harm following a breach of any condition – see Chapter 13 and EP regulation 36
Environment Agency	A non-departmental public body formed under the Environment Act 1995 http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1 – the Agency is the Regulator for Part A(1) Installations in England and Wales
EPA 1990 Part I	Part I of the Environmental Protection Act 1990
E-PRTR	European Pollutant Release Transfer Register – see Chapter 37
EP Regulations	The Environmental Permitting (England and Wales) Regulations 2007, statutory instrument (SI) number 2007/3538
EQS	Environmental Quality Standard – see Chapter 15
Existing installation	See Annex III
Fees and charges	Amounts required to be paid by Operators of Part A2 and B installations to local authorities in accordance with any charging scheme made by the Secretary of State/Welsh Ministers under EP regulation 65
Holding company	Section 1159(1) of the Companies Act 2006 is as follows: (1) A company is a "subsidiary" of another company, its "holding company", if that other company- (a) holds a majority of the voting rights in it, or (b) is a member of it and has the right to appoint or remove a majority of its board of directors, or (c) is a member of it and controls along, pursuant to an agreement with other members, a majority of the voting rights in it, or is a subsidiary of a company that is itself a subsidiary of that other company.

Installation	A stationary technical unit where one or more activities listed in Part 2 of Schedule 1 to the EP Regulations are carried out and any other location on the same site where any other directly-associated activities are carried out. and any activities that are technically linked. The terms 'regulated facility' and 'installation' are, in effect, interchangeable for A(2) and B activities. (See also Chapter 2.)
IPPC	Integrated Pollution Prevention and Control – a general term used to describe the Regulatory regime applied to Part A installations under the PPC Regulations which give effect to the IPPC Directive
IPPC Directive	Directive 96/61/EC concerning Integrated Pollution Prevention and Control http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996L0061:EN:HTML The European Commission tabled proposals for the amendment of the IPPC Directive in December 2007 http://ec.europa.eu/environment/ippc/proposal.htm
LA-IPPC	Local authority IPPC – a general term for the Part A2 regime which regulates the full range of IPPC impacts from installations listed under "Part A(2) in Part 2 of Schedule 1 to the EP Regulations
LAPC	Local Air Pollution Control – a regime introduced under Part I of the EPA 1990 alongside IPC, and carried over (with some modifications) to co-exist alongside IPPC as implemented under the PPC Regulations
LAPPC	Local authority pollution prevention and control - a general term for the Part B regime which regulates only emissions to air from installations carrying on activities listed in Part 2 of Schedule 1 to the EP Regulations
Local authority	In relation to Part B activities and installations, 'local authority' means district, borough and unitary councils, including county councils and county borough councils in Wales, the Council of the Isles of Scilly, and port health authorities constituted under section 2 of the Public Health (Control of Diseases) Act 1984. In relation to Part A2 activities and installations, it means all of the above with the exception of port health authorities. (See EP regulation 6.)
Local Authority Unit (LAU)	this is a small unit located in the Environment Agency, but including technical input from the Scottish Environment Protection Agency. It is dedicated to providing technical advice to Defra and WAG in support of LA-IPPC and LAPPC, and prepares the sector and process guidance notes in line with Defra/WAG policy (see in particular paragraph 33.16 of the Manual)
New installation	See Annex III
Operator	The person who has control over the operation of the installation/regulated facility (EP regulation 7)

Part A activity	An activity listed for control under IPPC by Part 2 of Schedule 1 to the EP Regulations and subject to integrated pollution prevention and control regulated by either the Environment Agency (A1) or local authorities (A2)
Part A1 activity	Written A(1) in the EP Regulations - an activity listed under Part A(1) of Part 2 of Schedule 1 to the EP Regulations and subject to integrated pollution prevention and control by the Environment Agency
Part A2 activity	Written A(2) in the EP Regulations - an activity listed under Part A(2) of Part 2 of Schedule 1 to the EP Regulations and subject to integrated pollution prevention and control by the relevant local authority
Part A Installation	An installation carrying on either a Part A(1) or Part A(2) activity or activities
Part A1 Installation	Any installation comprising one or more Part A(1) activities. It includes such installations where a Part A(2) or Part B activity is also carried out (Schedule 1, Part 1 paragraph 2 of the EP Regulations). (Annex III of the Manual has a more detailed interpretation.)
Part A2 installation	An installation comprising one or more Part A(2) activities which is not a Part A(1) installation. It includes such installations where a Part B activity is also carried out (Schedule 1, Part 2, paragraph 2 of the EP Regulations). (Annex III of the Manual has a more detailed interpretation.)
Part B activity	An activity listed under Part B of Part 2 of Schedule 1 to the EP Regulations and subject to air pollution regulation by the relevant local authority
Part B installation	An installation comprising one or more Part B activities which is not a Part A installation. (Annex III of the Manual has a more detailed interpretation.)
Permit	A permit granted under EP regulation 13 by a local authority allowing the operation of an installation subject to certain conditions
Pollution	Any emission as a result of human activity which may be harmful to human health or the quality of the environment, cause offence to any human senses, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment (EP regulation 2(1))
PPC Act	The Pollution Prevention and Control Act 1999 http://www.opsi.gov.uk/acts/acts1999/ukpga_19990024_en_1, under which the PPC Regulations and the EP Regulations are made
Production capacity	See Annex III of the Manual
Public Registers	Registers maintained by Regulators containing information on EP installations – see Chapter 29 of the Manual and Part 5 (regulations 45-56) of the EP Regulations
The PPC Regulations	The Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000/1973), as amended several times

Regulated facility	The collective term used in the EP Regulations for: ▪ an installation (which carries out the activities listed in Part 2 of Schedule 1 to the EP Regulations and any associated activities); ▪ a waste operation; or ▪ a mobile plant (carrying out either one of the Schedule 1 activities or a waste operation. See Chapter 2 and Annex III of the Manual
Regulator	The body responsible for applying the environmental permitting regime. The Environment Agency is the Regulator for a Part A(1) installation, while the relevant local authority is the Regulator for a Part A(2) or Part B installation, unless a direction is issued to change the Regulator in a particular case or set of cases
Revocation notice	A notice served by the Regulator under EP regulation 22 revoking all or part of a permit – see Chapter 28
The Secretary of State	The Secretary of State for Environment, Food and Rural Affairs
SED	The Solvent Emissions Directive http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0013:EN:HTML
Substantial change	See Chapter 24 and Annex III of the Manual
Suspension notice	A notice served by a local authority under EP regulation 37 which results in a permit ceasing to authorise the operation of the entire installation or specified activities, until remedial action has been taken against a risk of serious pollution – see Chapter 28
Techniques	In connection with BAT, includes both the technology used and the way in which the Installation is designed, built, maintained, operated and decommissioned (see Chapter 12 and Annex VIII)
Variation notice	A notice served by a local authority under EP regulation 20 varying the conditions or other provisions of a permit – see Chapter 24
WAG	The Welsh Assembly Government

References for guidance and environmental management

a) Secretary of State's Guidance (England and Wales): Environmental Permitting
b) General Guidance Manual on Policy and Procedures for A2 and B Installations, Revised July 2008 – available from the Defra website: http://www.defra.gov.uk/environment/ppc/localauth/pubs/guidance/manuals.htm
c) Current air quality objectives are specified in: The Air Quality (England) Regulations 2000 SI 928: http://www.opsi.gov.uk/si/si2000/20000928.htm and associated regulations: http://www.defra.gov.uk/environment/airquality/regulations.htm
d) OFTEC Standard OFS A103:2000 OFTEC oil fired appliance standard. Used lubricating oil burners for space and water heating appliances Heat outputs up to 400kW, available from Oil Firing Association for the Petroleum Industry, Century House, 100 High Street, Banstead, Surrey SM7 2NN, tel 01737 373311 fax 01737 373553 or tech@oftec.co.uk

e) HMIP Technical Guidance Note D1: "Guidelines on Discharge Stack Heights for Polluting Emissions", published by The Stationery Office, ISBN 0-11-752794-7.
f) M1 Sampling requirements for monitoring stack emissions to air from industrial installations, Environment Agency July 2002: http://publications.environment-agency.gov.uk/pdf/GEHO1105BJXX-e-e.pdf
g) M2 Monitoring of stack emissions to air. Environment Agency May 2003: http://publications.environment-agency.gov.uk/pdf/GEHO1105BJYF-e-e.pdf
h) The final consultation drafts and final published versions of all guidance notes in this series can be found on www.defra.gov.uk/environment/index.htm
i) Local Authority Unit of the Environment Agency for England and Wales www.environment-agency.gov.uk/business/lapc
j) Energy saving and environmental management measures can increase industry profits. Envirowise (formerly ETBPP) show how at www.envirowise.gov.uk (or free phone 0800 585794)
k) Defra/DTI - Changing Patterns - UK Government Framework for Sustainable Consumption and Production Sept 2003
l) Sustainable Consumption Roundtable (May 2006) I will if you will: Towards sustainable consumption: http://www.sd-commission.org.uk/publications/downloads/I_Will_If_You_Will.pdf
m) Free environmental regulation information from the Environment Agency: www.netregs.gov.uk
n) National Industrial Symbiosis Programme (shares information across all industrial sectors to produce guidance and case studies for resource efficiency): www.nisp.org.uk/

Inspections and Powers of Entry
Regular inspections will be carried out by the Regulator to check and ensure full compliance with the Permit conditions and residual duties. These inspections may be carried out without prior notice.
Under section 108(6) of the Environment Act 1995 authorised Officers of Maldon District Council have been granted powers of entry into any premises for the purposes of discharging relevant duties.

Reviews
The Regulator has a statutory duty to review the permit at least once every 6 years or in the following circumstances set out in regulation 34(1) of The Environmental Permitting (England and Wales) Regulations 2007:
a) The pollution from the installation is of such significance that the existing emission limit values for the permit need to be revised or new emission limit values need to be included in the permit
b) Substantial changes in BAT make it possible to reduce emissions from he installation or mobile plant significantly without imposing excessive costs; or
c) Operational safety of the activities carried out in the installation or mobile plant requires other techniques to be used

Health and Safety
This Permit is given in relation to the requirements of The Environmental Permitting (England and Wales) Regulations 2007. It must not be taken to replace any workplace responsibilities the Operator has under Health & Safety legislation.
Whenever emission limits quoted in this Permit conflict with occupational exposure limits set under the Health and Safety at Work Act 1974 to secure the health, safety or welfare of persons at work, the tighter limit should prevail.
Installation must be operated in order to protect persons at work as well as the environment. In achieving conditions in this Permit the Operator must not adopt any course of action that would put at risk the health, safety or welfare of persons at work.

Other Statutory Requirements
This Permit does not detract from any other statutory requirement, such as the need to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency, building regulations approval, or a waste disposal licence.
This Permit does not authorise a contravention of any other enactment or any order made, granted or issued under any enactment, nor does it authorise a contravention of any rule or breach of any agreement.
The Operator is advised to consult the Council's planning department regarding changes that may be required as a result of this Permit (e.g. chimney heights, or land use) as they may require planning permission:

Planning Services
Council Offices
Princes Road
Maldon
Essex
CM9 5DL

Transfer of Permits
When an Operator wants to transfer all or part of a permit to someone else, he/she and the proposed transferee must make a joint application and also pay a fee (see Chapter 23 GGM). They must both sign the application form. The joint application should contain their telephone numbers and addresses (if different) plus any additional correspondence address (if different). A suggested form is included in Part C at the end of this guidance. This form can be downloaded as a Word document from http://www.defra.gov.uk/environment/ppc/index.htm. The application should be accompanied by the current permit document and must include the appropriate transfer fee.

Noise
This Permit does not include reference to noise. Statutory noise nuisance is regulated separately under the provisions of Part III of the Environmental Protection Act 1990.

Appeals
Operators of LA-IPPC and LA-PPC installations and LAPPC may appeal to the Secretary of State or Welsh Ministers under EP regulation 31 against certain decisions made by the local authority. Schedule 6 of the Regulations sets out the detailed procedures.
Appeals should be despatched on the day they are dated, and addressed to:

The Planning Inspectorate
Environment Team, Major & Specialist Casework
Room 4/04 Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN
tel: 0117 372 8726
fax: 0117 372 8139

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