CHARNWOOD BOROUGH COUNCIL
ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016, REGULATION 18

PERMIT REFERENCE NO: 001203

VARIATION NOTICE

To: **ADVANCE TAPES INTERNATIONAL LTD**

Registered Office**: WESTMORELAND AVENUE, THURMASTON, LEICESTERSHIRE. LE4 8PH**

Charnwood Borough Council ('The Council'), in exercise of the powers conferred upon it by Regulation 18 of the Environmental Permitting (England and Wales) Regulations 2016 ("the 2016 Regulations") hereby gives you notice as follows:-

The Council has decided to vary and consolidate the conditions of Permit Reference (Permit Ref) granted under regulation 13 (1) of the 2016 Regulations in respect of (nature of installation).

Operated by: **ADVANCE TAPES INTERNATIONAL LTD**

At**: PINFOLD ROAD, THURMASTON, LEICESTERSHIRE, LE4 8AS**

Unless otherwise stated, the variations made by this Notice will come into effect immediately.

A consolidated permit as varied by this notice is set out in Schedule 1 attached.

Name	Date
Ann Green	01 March 2023

Authorised on behalf of Charnwood Borough Council

Issued by:
Regulatory Services, Environmental Protection Southfields, Southfields Road, Loughborough, Leicestershire LE11 2TX

EXPLANATORY NOTES

Notes

This notice varies the terms of the permit specified in the Notice by amending or deleting certain existing conditions and/or adding new conditions. The Schedule attached to the notice explain which conditions have been amended, added or deleted and the dates on which these have effect.

The Council have included a 'consolidated permit', which takes into account these and previous variations.

Appeals

Under regulation 31 and Schedule 6 of the 2016 Regulations operators have the right of appeal against the conditions attached to their permit by a variation notice. The right to appeal does not apply in circumstances where the notice implements a direction of the Secretary of State/Welsh Ministers given under regulations 61 or 62 or a direction when determining an appeal.

Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending permit conditions, or any of the mentioned notices.

Notice of appeal against a Variation Notice must be given within **two months** of the date of the variation notification, which is the subject matter of the appeal. The Secretary of State/Welsh Ministers may in a particular case allow notice of appeal to be given after the expiry of this period, but would only do so in the most compelling circumstances.

How to appeal

There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/operator making the appeal) are legally required to provide the Secretary of State or Welsh Minister with the following (see paragraphs 2(1) and (2) of Schedule 6 of the 2016 Regulations):

- written notice of the appeal
- a statement of the grounds of appeal;
- a copy of any relevant application;
- a copy of any relevant environmental permit;
- a copy of any relevant correspondence between the appellant and the regulator;
- a copy of any decision or notice which is the subject matter of the appeal; and
- a statement indicating whether the appellant wishes the appeal to be in the form of a hearing or dealt with by way of written representations.

Appellants should state whether any of the information enclosed with the appeal has been the subject of a successful application for confidentiality under regulation 48 of

the 2016 Regulations, and provide relevant details – see below. Unless such information is provided all documents submitted will be open to inspection.

Where to send your appeal documents
Appeals should be despatched on the day they are dated, and addressed to:

The Planning Inspectorate
Environment Team, Major and Specialist Casework
Room 4/04 Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN

If an appeal is made, the main parties will be kept informed about the next steps, and will also normally be provided with additional copies of each other's representations.
To withdraw an appeal – which may be done at any time - the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority who must in turn notify anyone with an interest in the appeal.

Costs

The operator and local authority will normally be expected to pay their own expenses during an appeal. Where a hearing or inquiry is held as part of the appeal process, by virtue of paragraph 5(6) of Schedule 6, either the appellant or the authority can apply for costs. Applications for costs are normally heard towards the end of the proceedings and will only be allowed if the party claiming them can show that the other side behaved unreasonably and put them to unnecessary expense. There is no provision for costs to be awarded where appeals are dealt with by written representatives.

Confidentiality

An operator may request certain information to remain confidential, i.e. not be placed on the public register. The operator must request the exclusion from the public register of confidential information at the time of supply of the information requested by this notice or any other notice. The operator should provide clear justification for each item wishing to be kept from the register. The onus is on the operator to provide a clear justification for each item to be kept from the register. It will not simply be sufficient to say that the process is a trade secret.

National Security

Information may be excluded from the public register on the grounds of National Security. If it is considered that the inclusion of information on a public register is contrary to the interests of national security, the operator may apply to the Secretary of State/Welsh Ministers, specifying the information and indicating the apparent nature of risk to national security. The operator must inform the local authority of such

an application, who will not include the information on the public register until the Secretary of State/Welsh Ministers has decided the matter.

Advice

If you do not understand the contents of this notice or would like to know more about it please contact the local authority. If you would like to receive independent advice about the contents of this notice, your rights and obligations then please contact a solicitor.

Warning

Failure to comply with a Variation Notice is an offence under regulation 38(2) of the 2016 Regulations. A person guilty of an offence under this regulation could be liable to (i) a fine or imprisonment for a term not exceeding 12 months or both; or (ii) to a fine or imprisonment for a term not exceeding 5 years or both, depending on whether the matter is dealt with in the Magistrates or Crown Court.

Data Protection

For information about how & why we may process your personal data, your data protection rights or how to contact our data protection officer, please view our Privacy Notice www.charnwood.gov.uk/pages/privacynotice

CHARNWOOD BOROUGH COUNCIL

POLLUTION PREVENTION AND CONTROL ACT 1999

ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016

PERMIT REF. NO. A2/02

Charnwood Borough Council (the Regulator) hereby permits, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

ADVANCE TAPES INTERNATIONAL LTD (the Operator),

whose registered office is:

WESTMORELAND AVENUE, THURMASTON, LEICESTERSHIRE. LE4 8PH.

To operate a coating and surface treating activity at:

PINFOLD ROAD, THURMASTON, LEICESTERSHIRE, LE4 8AS.
(National Grid Ref: SK 604090)

subject to the conditions outlined in this document. The conditions contained herein shall apply from the date of the Permit unless otherwise stated.

Name	Date
Ann Green	01/03/23

Authorised on behalf of Charnwood Borough Council

Permit issued by:

Regulatory Services, Environmental Protection Southfields, Southfields Road, Loughborough, Leicestershire LE11 2TX

Introductory note

This introductory note does not form a part of the permit

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016 (SI 2016/1154), as amended, ("the EP Regulations") to operate an installation carrying out the following activities:

"Surface treating substances, objects or products using organic solvents, in particular for dressing, printing, coating degreasing, waterproofing, sizing, painting, cleaning or impregnating, in a plant with a consumption capacity of more than 150 kg per hour or more than 200 tonnes per year."

Status Log

Detail	*Date*	*Comment*
Application A2/02	31 July 2003	Duly made 30/9/03
Response to request for information	18 February 2004	Information on H1 assessment
Response to request for information	21 January 2004	Information on noise survey
Request to extend determination period by 2 months	16 December 2003	Extension agreed by e-mail
Permit determined	31 October 2005	Permit issued
Variation Notice	27 March 2006	Revised permit issued
Draft Variation Notice	May 2011	Not issued
Draft Variation Notice	May 2012	Not issued
Draft Variation Notice	March 2013	Not issued
Variation Notice	02 November 2015	Revised permit issued
Variation Notice	May 2016	Not issued
Variation Notice	21 March 2022	Revised permit issued
Variation Notice	01 March 2023	Revised permit issued

Superseded Licences/Authorisations/Consents relating to this installation

Holder	**Reference No.**	**Date of Issue**
Advance Tapes International Ltd	036	14 March 1994

Origins of the conditions contained in the permit

The Secretary of State has issued various guidance notes to local authorities to assist with determining conditions. The conditions within this permit have been derived from the following guidance notes;

Sector Guidance Note SG 6(11) Guidance for Surface Treatment Using Solvents
Process Guidance Note PG 6/44(11) Guidance for Manufacture of Coating Materials
Process Guidance Note PG 6/18(11) Guidance for Paper Coating

Process Guidance Note PG 6/32(11) Guidance for Adhesive Coating

Process Description

Products

The Operator manufactures a wide range of adhesive tapes on the site primarily for use within the industrial sector. The range of products includes tapes made with the following substrates:

- PVC
- Polythene
- Cloth
- Aluminium foil

The following adhesive systems are manufactured on site:

- Solvent rubber based
- Solid rubber resin

The Operator also uses water based adhesives which are purchased from a 3rd party ready for use.

Principle Production Assets

The Operator has 4 coating lines on the site of which 3 are used for the coating of adhesive:

- Range 1 – used for the application of solvent based adhesives
- Range 2 – used for the application of water based adhesives
- Calender – used for the application of solid rubber adhesives

There are a number of ancillary items of plant used to support these processes of which the most important are:

- Solvent oxidiser
- Rubber chipper
- Dust extraction systems
- Solvent adhesive mixers
- Conditioning ovens
- Banbury rubber mixer
- A polythene coater

The coating lines and the ancillary plant are supported by a number of site services including:

- A boiler for the production of process steam
- Compressors for the production of compressed air
- Chillers to control plant operating temperatures

Solvents

The solvents which are stored in underground tanks encased in concrete are used in the following ways:

- Manufacture of adhesives for PVC tapes

- Manufacture of a key coat for PVC tapes
- Manufacture of a release coat for cloth tapes

Solvent is removed from the different coatings as it passes through drying ovens. The evaporated solvent is directed to a regenerative solvent oxidiser where any VOC's are destroyed. The heat generated from this process can then be recovered for use in various processes on the site.

Systems are in place to ensure that coating lines using solvents shut down when there is a problem with the solvent oxidiser. Monitoring of the incineration temperature to be used as 'surrogate' measurement parameter to demonstrate compliance.

Other Raw Materials and Emissions

Other key raw materials used on the site include synthetic and natural rubber, resins, and calcium carbonate. The primary emission created during the manufacture of 100% solid adhesive systems is dust which is air extracted by a dust extraction system.

Solvent Adhesive Manufacture & Storage

Solvent based adhesives are made and stored in the area Mixing Room as shown on the site layout in appendix 2. The adhesives are mixed in enclosed vessels before being discharged in to one of several stainless-steel storage containers prior to application. The adhesive storage area is not bunded given the very limited flow characteristics of the solvent-based adhesives when exposed to air. The steel adhesive containers are moved to lineside on the solvent coating line when required. Fugitive emissions are captured through the ovens on the solvent adhesive coating line through management of factory airflows.

Key Coat Manufacture

Key coat is required to ensure that the solvent based adhesive bonds to the PVC substrate.It is manufactured in an enclosed vessel in the Mixing Room area A2 as shown on the site layout in appendix 2. The vessel is located within an appropriately designed bund. Key coat is moved to lineside for application through an enclosed pipework system.

Release Coat Manufacture and Storage

Manufacture of the release coat takes place in the Mixing Room area A5 as shown on the site layout plan in appendix 2. Active ingredients are dissolved in a solvent using a simple stirrer in a closed vessel. The mixture is transported to its discharge point A38 shown on the site layout in appendix 2 using bunded trolleys for use on the calender. Fugitive emissions are captured through the ovens on the solvent adhesive coating line through management of factory airflows.

Solvent Based Coating

This is carried out on the Range 1 coating line where 2 coatings are applied. The first is a key coat and the second the adhesive. The active ingredients in both cases are

borne in a solvent suspension which is then dried off using steam heated ovens. The solvent vapour concentrations are managed within legally set limits using approved systems. The solvent laden air is passed from the ovens through ductwork to the solvent oxidiser where all VOCs are abated to within permitted limits.

Water Based Coating Activity

Water based adhesives are applied on Range 2. These adhesives are supplied in 1000 litre IBC's which are stored within the building prior to use. They are transferred to the coating line using stick pumps. Once applied the water carrier is evaporated using a number of steam heated drying ovens. This water vapour is carried through exhaust flues which are then directed to a single exhaust stack before being emitted to atmosphere.

Cloth Coating Activity

Solid rubber adhesives are produced using a feed system drawing from multiple enclosed raw material sources including bulk silos and tanks, big bags and rip and tip bins. The ingredients are dosed into a fully enclosed twin screw extruder before passing through a gear pump and onto the Calender. The Calender applies the adhesive to various fabric substrates using 2 precision engineered heated rollers.
After the adhesive has been applied the tape passes through a fully enclosed set of coating rollers where the solvent-based release coat is applied. The solvent vapour concentrations are managed within legally set limits using approved systems. The solvent laden air is passed from the ovens through ductwork to the solvent oxidiser where all VOCs are abated to within permitted limits.

Some cloth tapes require their surface to be treated to ensure that the adhesive bonds to it. This is done using a corona treatment process the ozone from which is appropriately vented.

Rubber Mixing Activity

A Banbury mixer is used on site to mix rubbers and is located at point A18 as shown on the site layout plan in appendix 2. The mixer is principally used to process waste adhesive from the Calender so that it can be recycled back into the production process thereby reducing the amount of waste sent to landfill. This process requires the addition of calcium carbonate, and the main source of dust is exhausted to the site's dust extraction system.

VOC Abatement

A regenerative thermal oxidiser is installed to ensure destruction of VOC emissions from the Calender and Range 1 coating lines. Fugitive losses from the mixing processes together with the flash off in the coating process are collected indirectly by the coating line drying oven air inlets preventing escape into the general environment. Solvent laden air from these sources is ducted directly into a single exhaust to be collected by the oxidisation system. Exhaust air from the oxidiser is discharged to atmosphere via a 13.2-metre-high stack.

The exhaust air from the drying process enters the oxidiser via twin poppet valve assemblies. It then passes through a ceramic filled bed heated to temperatures of between 850^{o}C – 960^{o}C by the addition of natural gas where it is held for sufficient time to ensure the complete destruction of pollutants.

As a consequence of the oxidation process solvent energy is given up to the ceramic bed whose temperature increases resulting is a reduced demand for natural gas. Periodically the inlet poppet valves will change over reversing the direction of the flow within the unit thus ensuring that the temperature profile of the ceramic bed is uniformly maintained. During the poppet valve changeover some VOC's will bypass the system however these are then captured in an expansion or 'puff' chamber where they are retained and then fed back to the inlet of the RTO.

Exhaust gases are emitted from the RTO at temperatures <180^{o}C before passing to the stack. Waste heat within the exhaust air stream is, prior to emission, passed through an air to hot water heat exchanger which has the potential to extract energy for use within the factory heating systems.

Data relating to total exhaust temperature, machine run speed, average core temperature of the oxidiser and exhaust temperature of the oxidiser is collected and stored on the data logger situated in the control cabin and is manually downloaded at regular intervals.

Summary of technical data:

Manufacturer	Megtec/RTO Euroclean - Megtec Vocsidizer
Reference Number	Model : VOC1715H-FZ-MT Serial No. P117602/371
Brief description	Regenerative Thermal Oxidiser
Flow rate	10,000 - 32,000Nm^3/hr
Exit air temperature	<180 ^{o}C
Combustion temperature	850 - 960 ^{o}C

Waste Storage

Waste products include both solid and special waste. The solid waste is mainly scrapped products, plastic packaging, wooden pallets, uncoated scrap PVC and Polythene, cardboard and paper which is removed by licensed carrier for recycling and landfill.

The special waste consists of liquid or part liquid waste of scrap solvent adhesive, water-based emulsion, and other washings together with oil/grease. This is stored in controlled quantities within a bunded area before removal by a licensed waste management company.

Principle Emissions and Emission Points

The principal emissions are of volatile organic compounds (VOCs) and particulates from the preparation, application and curing of coatings. Significant solvent-containing process emissions arising from the site are extracted to a thermal oxidiser prior to being released to atmosphere.

Other minor emission points on site include roof vents and minor local exhaust extraction systems. Activities involving the potential release of particulates are extracted to local filtration extraction equipment to prevent release to atmosphere.

The thermal incinerator is equipped with continuous emissions monitoring of temperature to ensure that the correct combustion conditions are maintained. Temperature is used as a surrogate measurement for VOC's.

Plant or Equipment Used Within the Installation

The key plant and equipment used at the installation are listed in table 1 below together with their emission points and any abatement. The emergency bypass exhausts are identified in bold.

Table 1: Plant & Equipment

Source	**Emission point ref:**	**Abatement**	**Location of emission point**
Underground Solvent Storage Tank Farm	A1	Vapour Recovery and Interceptor Tank	Ref to Advance Drg No 1010-24-12
Mixer MX1 (Keycoat)	A2	None	Ref to Advance Drg No 1010-24-12
Mixer MX2	A3	None	Ref to Advance Drg No 1010-24-12
Mixer MX3	A4	None	Ref to Advance Drg No 1010-24-12
Mixer MX5 (Release Coat)	A5	None	Ref to Advance Drg No 1010-24-12
Mixer MX6	A6	None	Ref to Advance Drg No 1010-24-12
Keycoat Storage	A7	None	Ref to Advance Drg No 1010-24-12
Catalyst Storage	A8	None	Ref to Advance Drg No 1010-24-12
Adhesive Storage (IBC's)	A9	None	Ref to Advance Drg No 1010-24-12
No. 1 Range Solvent Adhesive Coater	A10	A24	Ref to Advance Drg No 1010-24-12
No. 2 Range WB Adhesive Coater	A11	None	Ref to Advance Drg No 1010-24-12
Weighing Systems (Powders,Rubbers, Resins and Oils)	A12	A32	Ref to Advance Drg No 1010-24-12
Adhesive Compounding Extruder	A13	None	Ref to Advance Drg No 1010-24-12

KKA Calender Coater (Solids Adhesive)	A14	None	Ref to Advance Drg No 1010-24-12
Release Coat Dryer	A15	A24	Ref to Advance Drg No 1010-24-12
Post Conditioning Ovens	A16	None	Ref to Advance Drg No 1010-24-12
No. 5 Plant (Zimmer) Coater	A17	None	Ref to Advance Drg No 1010-24-12
Banbury Mixer	A18	A32	Ref to Advance Drg No 1010-24-12
Blackfriars Chipper	A19	A31	Ref to Advance Drg No 1010-24-12
Steam Boiler	A20	None	Ref to Advance Drg No 1010-24-12
Steam Boiler Flue	A21	None	Ref to Advance Drg No 1010-24-12
Air Compressor	A22	None	Ref to Advance Drg No 1010-24-12
Air Compressor	A23	None	Ref to Advance Drg No 1010-24-12
Regenerative Thermal Oxidiser	A24	Refer to Site Emission Limits	Ref to Advance Drg No 1010-24-12
Coating Plant By-pass stack	A25 **(bypass)**	Refer to Site Emission Limits	Ref to Advance Drg No 1010-24-12
Oxidiser Main Exhaust Stack	A26	Refer to Site Emission Limits	Ref to Advance Drg No 1010-24-12
No. 2 Range Coater Exhaust Stack	A27	None	Ref to Advance Drg No 1010-24-12
Batch Ranger Lab Mixer Flue	A28	Refer to Site Emission Limits	Ref to Advance Drg No 1010-24-12
Solvent wash off flue	A29	A24	Ref to Advance Drg No 1010-24-12
Quality Control fume cupboard vent	A30	None	Ref to Advance Drg No 1010-24-12
Polymer preparation dust collector	A31	Concrete Bund	Ref to Advance Drg No 1010-24-12
Camfil Tenkay Reverse Jet Filter Unit	A32	Concrete Bund	Ref to Advance Drg No 1010-24-12

Calcium Carbonate Silo	A33	Concrete Bund	Ref to Advance Drg No 1010-24-12
Polythene Granules Silo	A34	Concrete Bund	Ref to Advance Drg No 1010-24-12
Twin Compartment Oil Tank (Hyvis and Flexon)	A35	Twin Wall Bunded Tank	Ref to Advance Drg No 1010-24-12
Mixing Room Fugitive Loss Transfer Grill	A36	Indirectly linked to Oxidiser by management of airflows to oven inlets	Ref to Advance Drg No 1010-24-12
Coating Plant Fugitive losses	A37	Indirectly linked to Oxidiser by oven inlets	Ref to Advance Drg No 1010-24-12
Ozone Extraction Duct (Corona treatment unit)	A38	None	Ref to Advance Drg No 1010-24-12
Calender Boules Extraction	A39	None	Ref to Advance Drg No 1010-24-12
Boiler Blow Down Vessel	S1	Connection to Foul Drain	Ref to Advance Drg No 1010-24-12
Rainwater from Solvent Tanks	S2	Solvent Interceptor	Ref to Advance Drg No 1010-24-12
Rainwater from hardstanding	S3	Soakaway	Ref to Advance Drg No 1010-24-12
Compressor condensate	S4	Discharged to foul drain	Ref to Advance Drg No 1010-24-12
Bunded Waste Compound Rainwater	S5	Runs to drain, and then into interceptor. Drain sealed to permit release of rainwater run-off only.	Ref to Advance Drg No 1010-24-12
No 5 Plant Cooling Bleed and drainage	S6	Discharged to foul drain	Ref to Advance Drg No 1010-24-12
Bunded Waste Compound	L1	Licenced Waste Carrier	Ref to Advance Drg No 1010-24-12
Skips	L2	Licenced Waste Carrier	Ref to Advance Drg No 1010-24-12

The installation boundary and key items of equipment mentioned in permit conditions are shown in the figures 1 & 2 attached at the end of this permit.

End of Introductory Note

The Operator is permitted to perform the activities and/or associated activities as specified in table 2 below: -

Table 2: Activities

Activity	Description of specified activity	Limits of specified activity
Processing of solid components.	Preparation of solid raw materials including weighing, batching and granulation (size reduction)	Processing prior to use, of rubbers and powders used in the manufacture of adhesives.
Adhesive manufacture.	5 mechanical mixing vessels used for the preparation of solvent based coatings.	Receipt and processing of both solid and liquid raw materials for the production of adhesives and coatings used in the manufacture of finished product.
Coating of products.	The storage, application, drying, curing or coating of both filmic and cloth substrates.	Receipt of raw materials to the dispatch of finished products in specified areas as detailed on site layout plan.
Storage and handling of raw materials including the bulk storage of solvents.	Storage of solid and liquid raw materials in underground and above ground locations including storage tanks, big bags, IBC's and drums.	Receipt and storage of raw materials for transfer and use in other process areas.
Product drying.	Drying ovens to remove solvent carrier.	Product drying carried out in areas shown on site layout plan.
The storage and disposal of waste solvents and solvent contaminated wastes.	Handling, storage, and disposal of wastes from the installation.	From the generation of the wastes to their storage and final disposal off site.
Control and thermal oxidation of VOC's for emissions to air.	Abatement of releases to air.	Extraction of waste gases and treatment in Regenerative Thermal Oxidiser prior to release to atmosphere.
Processing of solid adhesive systems.	Mixing, milling, blending of materials within enclosed processing machines.	Processing prior to use, particularly of rubbers, powders and resins.
Coating of water based adhesives	Storage and application of water based adhesives and coatings.	Application of water based adhesives carried out in areas shown on site layout plan.
Manufacture of release coatings.	The production of coatings by the	Release coat is manufactured within areas shown on site

	dissolution of solid ingredients in solvents.	layout plan.
Storage of release coat in enclosed drums.	Storage in enclosed drums until required.	Internal storage of release coat, shown on site layout plan.
Coating of fabrics with molten polythene.	Application on a dedicated coating line.	In a specific area as identified on site layout plan.

Subject to compliance with the following conditions:
Permit Conditions

Standard Conditions

1. The only plant and equipment permitted for use in this installation is that listed in Table 1 above. No other plant or equipment shall be utilised without the written consent of an authorised officer of the Regulator.

2. If the Operator proposes to make a change in operation of the installation it shall, 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 of operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

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

Emission Limits and Controls - Air

4. The emission limits and monitoring frequencies in Table 3 below shall be complied with. The Operator shall carry out monitoring of the parameters listed in Table 3 below from the emission points and at least at the frequencies specified.

Table 3: Emission Limits

Emission point ref:	**Parameter**	**Emission Limit**	**Monitoring frequency**
A2 – A5 Mixer MX 1 , 2, 3 & 6	VOC's	75mg/m^3 **Fugitive limit** 20% of solvent input	Once a year extractive monitoring
A25	VOC's	**Fugitive limit**	Once a year by

Coating plant By-pass stack (unabated)		20% of solvent input	calculation
A26 Oxidiser Main Exhaust	Products from combustion : CO, No_x VOC's	 100 mg/m³ * 100 mg/m³ * 50 mg/m³ * ** as 30 minute mean for contained sources*	Once a year manual extractive monitoring used as surrogate measurement of VOC destruction.
A21 Boiler flue	Products of combustion and natural gas: CO, No_x Particulate Matter	 100 mg/m³ * 100 mg/m³ * 50 mg/m³ * ** as 30 minute mean for contained sources*	Once a year manual extractive testing
A28 Lab Mixer Flue	VOC's	75 mg/m³	Once a year manual extractive monitoring
A30 fume cupboard vent	VOC's	75 mg/m³	Once a year manual extractive monitoring
A31 Polymer prep dust collector outlet	Dusts and Particulate Matter	50 mg/m³ *	Once a year manual extractive monitoring
A38 Ozone extraction duct (Corona treatment unit)	Ozone	200kg Yearly	Once a year manual extractive monitoring
A32 Dust collection outlet	Total Particulate Matter (china clay, Maize starch, silica, Titanium dioxide, Takifying hydrocarbon resin dust)	50mg/m³	Once a year manual extractive monitoring
A39 Calendar Boules	VOC's	50mg/m³	Once a year manual extractive monitoring

Note 1. *The reference conditions for emission limits in this section are: 273.15K, 101.3kPa, without correction for water vapour content, unless stated otherwise.*

Note 2. *Observation points must provide an unimpeded view of the emission points listed in the process description above and at appropriate points around the installation boundary.*

Note 3. *With reference to point A25 the VOC emission limit detailed above does not apply when the cloth coating line is operated in isolation. Hours run in bypass with just the cloth coating line running should be logged and recorded. The total amount should not exceed 20% of the toluene consumed on site*

5. The introduction of dilution air to achieve the emission concentration limits detailed in table 3 above is not permitted. However, the introduction of air to balance arrestment systems is acceptable.

6. No additional chimneys, vents or process exhausts which increase emissions of VOC's to atmosphere shall be provided without the written consent of the Regulator.

7. The Operator shall use BAT so as to prevent or, where that is not practicable, to reduce fugitive emission of substances to air from the Permitted Installation in particular from:
   - Storage areas
   - Handling areas used for powders and dusty materials
   - Mixing room
   - Coating plant
   - Buildings
   - Pipes, valves and other transfer systems
   - Open surfaces
   - Loading and unloading of materials
   - By-pass of abatement equipment
   - Accidental losses due to failure, break down or leakage

Determination of Solvent Consumption

8. The Operator shall determine the organic solvent consumption, the total mass of organic solvent inputs minus any solvents sent for reuse/recovery off-site, at the installation on an annual basis and this shall be submitted to the Regulator annually by 30 April. This shall be produced in the form of a mass balance calculation to determine the annual actual consumption of organic solvent at this installation.

Solvent Management Report

9. A Solvent Management Report (SMR) shall be produced annually by the Operator and submitted to the Regulator by 30 April. This shall be used to determine fugitive emissions from the installation required by Condition 4. The SMR shall cover the period of 1 January to 31 December of the previous year. The SMR shall be forwarded to the Regulator annually.

10. Total organic solvent emissions shall be calculated as described in the SMR referred to in Condition 9 and fugitive solvent emissions shall not exceed 20 % of the total organic solvent input.

Designated Risk Phrase Materials, Emission Limits and Conditions

11. The Operator shall maintain a register of substances or materials used in the process which have designated risk phrases R45, R46, R49, R60 and R61 or hazard statement H340, H350, H350i, H360D, or H360F assigned to them. The register shall be updated as necessary (and at least every 12 months) and updates shall be forwarded to the Regulator by 30 April.

12. Substances or preparations which because of their content of VOC's are classified as carcinogens, mutagens, or toxic to reproduction under the Solvent Emission (England and Wales) Regulations 2004 and have the risk phrases of R45, R46, R49, R60 and R61 or hazard statement H340, H350, H350i, H360D, or H360F assigned to them, shall be replaced as far as possible by less harmful substances or preparations within the shortest possible time. If replacement of the Risk Phrase substance is not practical, the Operator shall provide a report detailing the reasons for this, and how the Operator is controlling and limiting the use of these substances. The report shall be updated as necessary (and at least every 12 months) and forwarded to the Regulator by 30 April.

13. No new materials which because of their content of VOC's are classified as carcinogens, mutagens, or toxic to reproduction and have the risk phrases R45, R46, R49, R60 and R61 or hazard statement H340, H350, H350i, H360D, or H360F assigned to them shall be introduced into this process/ activity without the prior notification and permission of an authorised officer from the Regulator.

14. Designated materials because of their halogenated VOC content with risk phrases R40 or R68 and hazard statement H341 or H351 shall be controlled as far as is technically and economically feasible.

15. The Operator shall submit details of how the use of R40, R68 and hazard statement H341 and H351 designated substances are being limited and controlled. This report shall be updated as necessary (and at least every 12 months) and forwarded to the Regulator by 30 April.

Emission Limits and Controls- Surface Water and Sewers

16. No emissions from this Permitted Installation shall be made to surface water.

17. All discharges to the foul sewer from the boiler plant shall meet the requirements of the site's discharge consent in terms of content and temperature. The Operator shall carry out compliance testing at least once a year. A summary of the results shall be available upon request to an authorised officer of the Regulator.

18. The effluent shall not contain any other substance or properties not listed in condition 17 above except with the prior written consent of an authorised officer of Regulator.

19. The Operator shall compile and maintain a clear diagrammatic record of the routing of all drains, subsurface pipework, sumps and storage vessels including the type and broad location of the receiving environment.

20. Run-off from raw material and waste storage areas shall be channelled or transported to suitable effluent treatment plant, e.g., an interceptor, where necessary to prevent or minimise discharge of pollutants to surface waters and sewers.

21. The Operator shall identity the potential risk to the environment from drainage systems recorded under condition 19 above and shall devise and implement an inspection and maintenance programme having regard to the nature and volume of waste waters, groundwater vulnerability and proximity of drainages system to surface waters.

Emissions Limits and Controls – Groundwater

22. No emission from the Permitted Installation shall give rise to the introduction into groundwater of any 'hazardous substance' or 'non-hazardous pollutant' as detailed in Annex VIII of the Ground Water Directive 2006 (directive 2000/60EC).

23. The foul sewer line shall be inspected every five years to identify any evidence of leaks or damage. Where the inspection determines that sub-surface infrastructure is leaking, arrangements shall be made to repair, isolate or otherwise contain the leak in accordance with a defined action plan and the Regulator shall be notified immediately.

Monitoring, Investigation and Recording

24. Visual and olfactory assessments (including ozone) of emissions from the principal emission points described in the introduction to this permit shall be made at least once daily during daylight hours. Observation points must provide an unimpeded view of the emission points listed in table 1 above and at appropriate points around the installation boundary. In the event of one or more visible or odorous emission being observed, immediate action shall be

taken to determine the cause of the emission, the activity stopped, and the activity not recommenced until the reason for the contravention has been ascertained and remedied.

25 Records of all visual and olfactory assessments and of any remedial action taken shall be kept in a logbook by the Operator. This log shall include the date, time and name of the person making the entry and where relevant the weather conditions, source of emission, point of observation and remedial action taken. The log shall be kept for at least two years and a summary submitted to the Regulator annually.

26. The results of all monitoring, including non-continuous monitoring shall be retained by the Operator for a minimum of two years and made available for examination by an authorised officer of the Regulator on request.

27 The results of the annual non-continuous emission testing shall be forwarded to the Regulator together with the Operator's annual report. The monitoring reports shall be submitted in electronic format (a paper copy to be supplied if requested).

28 Any non-conformities identified by the annual non-continuous testing are to be notified to the Regulator immediately.

Monitoring of VOC Abated Releases

29. The regenerative thermal oxidiser shall be provided with quantitative monitoring and recording to demonstrate adequate VOC destruction. The oxidiser shall operate within a temperature range agreed with the regulator and shall be fitted with audible and visual alarms which shall activate if the temperature falls below 830°C.

Monitoring of the incineration temperature to be used as 'surrogate' measurement parameter to demonstrate compliance.

30. All instruments used for monitoring shall be checked in accordance with manufacturer's instructions and the information shall be downloaded on a regular basis.

31 All monitoring equipment shall be operated, maintained, and calibrated in accordance with the manufacturer's instructions. Documented evidence of maintenance and calibration results shall be recorded in the logbook and made available for inspection by an authorised officer of the Regulator on request.

32. Any failure or bypass of the thermal oxidiser allowing abnormal emissions for periods of greater than 24 hours shall be notified to the Regulator within 12 hours. Where malfunction, breakdown or failure of the oxidiser leads to abnormal emissions then the continued operation shall be limited to the

timescale agreed with the regulator. The time and duration of oxidiser breakdown, causes and corrective action must be recorded in the log required by condition 25.

33. Adequate safe facilities for sampling that meet the procedural requirements of BS.ISO 9096:2003 shall be provided on all plant to be monitored. Where monitoring is not in accordance with the main procedural requirements of the relevant standards, deviations, as well as an estimation of any error shall be reported.

34. In the event of adverse results from any monitoring activity the site Operator shall:
    - identify the cause and take corrective action.
    - record as much detail as possible regarding the cause and extent of the problem, and the
    - action taken by the Operator to rectify the situation.
    - re-test to demonstrate compliance as soon as possible; and
    - notify the Regulator.

35. In any case where monitoring results exceed the emission limits specified in Condition 4 above the Regulator's Environmental Protection Service shall be notified by phone within one day of the results being obtained. Where the emissions exceed twice the limit, the Regulator shall be notified within 1 hour of the results being obtained.

36. The Operator shall provide a list of key abatement plant and shall have a written plan for dealing with failure.

Visible and Odorous Emissions

37. There shall be no offensive odour or visible airborne emission from the process beyond the site boundary, as perceived by a duly authorised officer from the Regulator. Where there are problems that, in the opinion of the Regulator may be attributable to the installation the Operator shall undertake an inspection and assessment to determine which operation(s) is the cause and abate the emission. Where deemed necessary by the Regulator, the Operator shall undertake ambient monitoring to identify the process operations giving rise to the emission. The monitoring method shall be agreed with the Regulator and once the source is known, corrective action shall be taken by the Operator to rectify the problem without delay.

38. All emissions to air from the installation, other than steam or condensed water vapour, shall be colourless and free from persistent visible emissions.

39. Emissions from combustion processes shall in normal operation be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann

Shade 1, as described in British Standard BS 2742: 1969. There shall be no visible emissions from any other source beyond the site boundary.

40. The Operator shall regularly assess and review the emissions from the operation of the 'bypass'stack of the Thermal Oxidiser. This shall include an options appraisal of suitable methodology to prevent emissions from this stack to ensure that odour is not detectable at the site boundary.

41. The Operator shall review the airflows and solvent concentration to the thermal oxidiser to identify where further improvements can be made. The smoke and olfactory summary report shall be used as a means to identify if any improvements are required and submitted to the Regulator as part of the Annual Report.

Abnormal Events

42. Where any visible airborne emission is observed or where any abnormal emissions, malfunctions or breakdown leading to a significant escape of VOC's, particulate matter, odour, or fumes occurs the Operator shall:

- Investigate and undertake remedial action **immediately.**
- Adjust the process or activity to minimise those emissions and
- Promptly record (within one working day) in the logbook, required by condition 25, the events and actions taken.

43. The Regulator shall be informed immediately by telephone where:

- the emission is likely to have an effect on the local community.
- in the event of the failure of key arrestment plant, for example, bag filtration plant and the thermal oxidiser.

44. In cases where emissions are likely to cause an immediate danger to human health, the operation of the activity shall be suspended.

45. In the event of a continuous indicative emissions trigger, an abnormal emission being identified during a visual assessment test, or an abnormal emission being identified during other routine activities anywhere on the installation by the Operator or authorised officer from the Regulator, the Operator shall:

- identify the cause and take corrective action.
- record as much detail in the logbook (condition 25) as possible. regarding the cause and extent of the problem, and
- the action taken by the Operator to rectify the situation.

- if appropriate re-test to demonstrate compliance as soon as possible and
- notify the Regulator immediately by telephone if the emission is likely to result in perceptible off-site impact.

46. Incidents or alleged incidents of odorous emissions outside the installation boundary shall be investigated by the Operator. The nature of and conclusions arising from the investigation shall be retained by the Operator for a period of at least two years and made available to an authorised officer of the Regulator on request.

Calibration and Compliance Monitoring

47. Extractive testing to monitor compliance with the emissions limits given in Condition 4 shall be undertaken in accordance with recognised standards. In all cases this shall be to the MCERTS, or equivalent, standards for both procedures and personnel. The proposed test methods for measuring compliance with emission concentration limits shall be agreed with the Regulator and shall only be changed with the written agreement of the Regulator.

The test sampling shall meet the following requirements;

a) For batch processes, where the production operation is completed within 2 hours, then extractive sampling shall take place over a complete cycle of the activity; **and**
b) The sampling period shall be sufficient such that at least 3 results are obtained.

48. For activities that are continuous or have a batch cycle that is not compatible with the time available for sampling, then the data shall be obtained over a minimum period of 2 hours in total.

49. No extractive testing result shall exceed the emission concentrations specified in condition 4.

50. For periodic measurements of VOC at least three readings shall be obtained during each measurement exercise. VOC emission limit values, shall be considered to be complied with if, in one monitoring exercise:

a) The average of all readings does not exceed the emission limit values and
b) None of the hourly averages exceed the emission limit value by more than a factor of 1.5.

Where continues monitoring is carried out to demonstrate compliance with VOC emission limits:

c) None of the averages over 24 hours of normal operation exceeds the emission limit values, and
d) None of the hourly averages exceeds the emission limit values by more than a factor of 1.5.

Storage of Solid Raw Materials and Powders

51. The receipt, handling and storage of solids and powder raw materials where appropriate shall be carried out so as to minimise noise, spillage, leaks, dust and the emission of particulate matter

52. Storage areas, where possible, should be under cover and protected from the elements to avoid or minimise environmental impact.

53. Storage areas shall be hard surfaced.

Emissions from Fixed Storage Silos

54. Visual assessment of emissions from silo inlet connections and the silo arrestment plant shall be undertaken throughout the duration of all bulk deliveries. Particular regard shall be made to the first and last five minutes of the delivery. The results of the assessment and the start and finish times of all bulk deliveries shall be recorded in the logbook required by condition 25.

55. All silo arrestment plant and arrestment plant serving other processes shall be inspected for correct operation on the following frequencies:

Filter cleaning method	Frequency of inspection
Silos with reverse jets - Phase 2	At least once a month
Silos with pulsed air	At least once a month

56. Each silo delivery inlet point shall be clearly marked with the delivery pressure to be applied and the nature of the material contained therein.

57. A written procedure shall be devised and implemented to prevent the overfilling of silos.

58. Appropriate visual checks shall be made before deliveries take place and Tanker drivers shall be informed of the correct procedure to be followed via the written procedure.

59. The connection of transfer lines to the tanker discharge point and silo delivery inlet point shall be checked before the transfer of dry/dusty materials commences. The transfer shall only commence once it has been established that the connection to these points will prevent the emission of dust. Any emission occurring from the transfer line during bulk deliveries shall be recorded in the log as detailed in condition 25.

60. No particulate emissions shall be visible during silo filling activities. If emissions of particulate matter are visible from ducting, pipework, the pressure relief device or dust arrestment plant during silo filling, the operation shall cease, and the cause of the problem rectified prior to further deliveries taking place. Tanker drivers should be informed of the correct procedure to be followed.

61. Deliveries to silos from road vehicles shall only be made using tankers with an on-board (truck mounted) relief valve and filtration system. This means that venting air from the tanker at the end of a delivery shall not take place through the silo.

62. During delivery from tankers, the venting to air to the silo shall be at a limited rate to avoid pressurisation of the silo. Care shall be taken at the end of the delivery. Only tankers with sufficient valve work to allow gradual release and controlled venting shall be used.

Storage of Liquid Raw Materials

63. The receipt, handling, and storage of organic solvents where appropriate shall be carried out to minimise noise, spillage, leaks and the emission of volatile organic compounds.

64. Storage areas, where possible, should be under cover and protected from the elements to avoid or minimise environmental impact.

65. Storage areas shall be hard surfaced.

66. The connections to any bulk VOC or liquid storage tanks shall be kept securely locked at all times when a connection is not being made and shall be under the direct control of the named personnel only

67. Coatings and raw materials containing VOC's (including thinners and cleaning solvents) shall be stored in closed storage containers to prevent any fugitive emissions to air.

68. In external areas, all storage containers, whether full, partly full or empty, shall be stored within bunded enclosed areas. The bunding shall be impervious, resistant to liquids and capable of holding 110% of the capacity of the largest stored container and prevent overflow into surrounding areas.

69. All drummed materials and bulk liquid storage containers shall be inspected for leakage at least once per day. Any leakage identified shall be dealt with immediately, and the action taken recorded in the logbook.

70. Where damage occurs to containment areas, this damage shall be repaired as soon as is practicable and, in any case, no longer than 6 weeks from the date of detection of the damage after inspection.

71. The Operator shall inspect the designated storage areas once per month to ensure that materials or wastes are adequately contained. The results of the inspection along with any repair work (where necessary) shall be recorded in the logbook required to be kept by condition 25.

72. Structural integrity of any underground solvent, or oil, storage tank shall be checked on an annual basis. Pressure testing, used as a surrogate means of evidence, shall be deemed acceptable.

73. Any accumulation of liquid raw materials found outside of the designated storage area shall be considered a spillage and shall be dealt with in accordance with the requirements of condition 25.

Emissions from Solvent and other Liquid Raw Material Storage Tanks

74. All vessels or containers containing materials with an organic solvent content shall be kept tightly lidded or enclosed when not in use.

75. Each tank or vessel shall be clearly identified with the name material contained therein.

76. A written procedure shall be devised and implemented to prevent the overfilling of any above, or below ground. solvent or oil storage tanks.

77. Appropriate visual checks shall be made before deliveries take place and tanker drivers shall be informed of the correct procedure to be followed via a written procedure.

78. The pipe work associated with transfer of solvents, oils or other volatile materials shall be checked for integrity and shall be fitted with an isolation valve on both sides of the coupling to minimise losses from the tanks, IBC's or the pipe work. For bulk tanker deliveries a manually operated valve fitted to the tanker discharge point may constitute one of the points of isolation.

79. The connection of transfer lines to the tanker discharge point and point of entry to the tank shall be checked before the transfer of any materials commences. The transfer shall only commence once it has been established that the connection to these points will prevent any loss of fluid. Any liquid loss from the transfer line during delivery shall be recorded in the log as detailed in condition 25.

80. Bulk storage tanks for solvents and solvent-containing liquids shall be back vented to the delivery tank during filling with all connections being located within a protected area

81. All bulk storage tanks for solvents shall be equipped with audible and/or visual high-level alarms to warn of overfilling. The correct operation of such alarms shall be checked at least once a month or before each delivery,

whichever is the longer interval and the results recorded in the logbook detailed in condition 25.

Handling Techniques

83. Other raw materials used in the prescribed process and all waste materials produced shall be handled with care so as to prevent or reduce to an absolute minimum any emissions to all media.

84. All mixing, emptying and transfer of coatings or raw materials containing VOCs shall be undertaken in covered or closed containers.

85. The coupling of solvent storage containers to transfer pipe work or mixing systems shall only be undertaken by nominated persons trained to do so and shall only be carried out in a spill protected area.

86. Spillages of liquids and finely divided materials shall be cleaned up immediately. Liquid spillages shall be contained and cleaned up by the use of a suitable absorbent material. Spillages of finely divided or powdery materials shall be removed by means of vacuum cleaning using an industrial grade vacuum cleaner or by wet cleaning methods, dry sweeping methods shall not be permitted.

Cleaning Controls (including surface cleaning)

87. The cleaning of plant and equipment (including application equipment) shall be carried out in such a way that emissions of volatile organic compounds to air are prevented or controlled to meet the requirements of condition 4 of this permit.

88. Cleaning operations involving organic solvents shall be periodically reviewed, normally at least once every 2 years, to identify opportunities for reducing VOC emissions (e.g., cleaning steps that can be eliminated, or alternative cleaning methods). A copy of this review shall be provided to the Regulator as part of the Operator's annual report.

89. Where fixed equipment is cleaned *in situ*, it shall where practicable, be kept enclosed whilst cleaning is carried out.

90. Where equipment is cleaned off-line, it shall be carried out using enclosed cleaning machines 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 suitable arrestment plant.

91. Residual coating/adhesives, contained in parts of the application equipment shall be removed prior to cleaning.

Operational Controls

92. A programme to monitor and record the consumption of coatings/organic solvents against product produced shall be used to minimise the amount of excess organic solvent used. Progress to be provided to the Regulator with the Operator's annual report.

Waste Storage & Handling

93. Waste storage areas shall be clearly marked and/or signed, wastes shall be segregated wherever practicable, and all waste containers shall be clearly labelled.

94. Waste storage areas shall be bunded and impervious to the liquid material being stored in the area. The bunded area shall be capable of storing 110% of the capacity of the largest tank/container within the bund.

95. The integrity of storage tanks and bunds shall be inspected and documented monthly, particularly where corrosive substances are involved. These inspections should be included in the maintenance schedule required by conditions 129 and copies stored with the logbook required to be kept in accordance with condition 25.

96. All potentially odorous waste materials shall be handled in accordance with a written procedure a copy of which shall be made available to the Regulator upon request.

97. All potentially odorous and organic solvent contaminated waste materials shall be stored in closed containers.

98. Prior to disposal empty/nominally empty containers and drums shall be closed to minimise emissions. These containers shall be labelled, so that all that handle them are aware of their contents and hazardous properties.

99. Used solvent and waste shall be recycled off site and copies of any receipts shall be kept for 3 years.

100. Dust from abatement plant shall be collected in robust bags that can be disposed of directly, or in fully enclosed skips to avoid the release of fugitive dusts during transfer.

Efficient Use of Raw Materials

101. The Operator shall maintain a register of all raw materials used on site and consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact.

102. The Operator shall carry out periodic waste minimisation audits. Progress on waste minimisation shall be submitted as part of the Operator's annual report.

Dust and Spillage Control

103. Organic solvent containment and spillage equipment shall be readily available in all organic solvent handling areas. All spillages and leaks of VOC shall be cleaned up immediately in accordance with the documented procedure and the collected material held in an enclosed container pending removal from site.

104. All arisings of dry dusty materials and spillages shall be stored in closed containers and handled in a manner that avoids emissions.

105. A high standard of housekeeping shall be maintained.

Chimneys Vents and Process Exhausts

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

107. The stacks to the contained emission points shall not be fitted with any restriction at the final opening such as a plate, cap or cowl.

108. Emissions from the contained emission points shall be designed for an efflux velocity of not less than 10m/s at full load operation. No changes to any of the plant associated with these sources shall be made which is likely to significantly reduce or increase this efflux velocity without the prior permission of the Regulator.

Noise Emissions

109. The Operator shall:

- Carry out regular checks to identity any plant or equipment likely to give rise to noise complaints. The checks shall specifically identify plant or equipment capable of being discerned at the installation boundary.

- Annually review the results of the above noise checks such that any changes to the identified plant or equipment noted above are acted upon and any remedial action taken as required

- Maintain a record of complaints regarding noise emissions from the installation in the logbook required to be kept in accordance with condition 25.

- Implement noise management plans as required by the above checks and any complaints received.

- Submit annual summary of noise testing at site boundary with Operator's annual report.

110. All new plant or equipment brought into the installation, or any plant or equipment that undergoes any modification etc shall be demonstrated to comply with the requirements of BAT.

The Operator shall demonstrate that sound power levels for substantially changed plant or equipment shall be lower or comparable to that for existing. For new plant or equipment, the emitted noise levels shall be demonstrated to be as low as possible when compared to other manufacturers' plant or equipment of the same type.

111. No new plant or equipment shall be permitted within the installation except where:

- The plant or equipment can be demonstrated to have a minimal environmental impact when compared to data from the regular site noise checks

or

- Where plant or equipment cannot be demonstrated to meet the standard above, a full noise survey shall be carried out and the results modelled to show the specific impact of the new plant or equipment on the environment. The modelling exercise shall take account of any relevant noise attenuation measures. The results of the modelling shall be submitted to the Regulator and shall demonstrate BAT.

112. In the event of the Regulator receiving a complaint of noise associated with any element or activity within the installation boundary, the Operator shall:

I. Be required to investigate the source of the complaint,
II. Carry out such monitoring, survey or modelling of the source of the complaint to demonstrate, to the satisfaction of the Regulator, either:

a) That the complaint is unfounded, or
b) The complaint has substance.

Where (II)(b) above is found to be the case, the Operator shall arrange to carry out such works or change procedures or processes in such a way, that a re-assessment carried out in (II) above comes to the conclusion in (II)(a).

All time scales in relation to any aspect of this condition are to be set by the Regulator in the event of a complaint being received.

113. The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:-

- equipment maintenance, e.g. of fans, pumps, motors, conveyors and mobile plant;
- use and maintenance of appropriate attenuation, eg silencers, barriers, enclosures;
- timing and location of noisy activities and vehicle movements;
- periodic checking of noise emissions, either qualitatively or quantitatively; and
- maintenance of building fabric.

Raw Materials & Waste Minimisation

114. The Operator shall:

- maintain an inventory covering the principal types of raw materials used. Any changes to the inventory shall be notified to the Regulator annually.

- Review alternatives for the principal types of raw materials used with regard to their environmental impact. Notably this shall include, solvents, cleaning products and water use. Such reviews shall be submitted to the Regulator annually.

- Maintain records to demonstrate that quality and/or environmental control procedures are used to minimise any potential adverse environmental impact from the use or storage of raw materials.

  All information required by this condition shall be submitted to the Regulator annually. All information shall be retained by the Operator for inspection by the Regulator at any time.

115. The Operator shall demonstrate that a systematic approach to the reduction of waste at source is being used.

  The Operator shall carry out regular waste minimisation audits. The projects for optimising the use of raw materials shall be submitted to the Regulator as part of the Operator's annual report.

  Specific improvements resulting from the identified projects shall be carried out within agreed timescales.

116. The Operator shall provide to the Regulator by the 30 April each year an annual summary of performance on waste minimisation. This summary should include:

  - KGs of VOC consumed v m^2 of goods produced.

- KGs of waste produced v m² of goods produced.
- Volume of clean water consumed v m² of goods produced.

117. The Operator shall maintain and implement a system to 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.

118. As part of its annual report the Operator shall provide information on potential markets for the recovery/re-use of wastes that are currently disposed of to landfill.

Water Usage

119. The Operator shall measure the monthly volume of mains water used in the installation. An annual summary of this record shall be forwarded to the Regulator by the 30 April each year.

120. The Operator shall seek to identify further opportunities to reduce water usage and advise the Regulator as part of its annual report.

121. The Operator shall provide to the Regulator by the 30 April each year an annual summary of performance on water usage.

Energy Efficiency

122. The Operator shall produce an annual report on the energy consumed at the installation over the previous calendar year by 30 April each year. The report shall monitor energy usage and identity target areas for reduction and shall be updated annually.

123. The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Environment Agency's Energy Efficiency Horizontal Guidance Note H2 as from time to time amended. Energy efficiency shall be secured in particular by:

- Ensuring that the appropriate operating and maintenance systems are in place;
- Ensuring that all plant is adequately insulated to minimise energy loss or gain;
- Ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
- Employing appropriate basic control, such as simple sensors and timers, to avoid unnecessary discharge of heated water to air;
- Where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in

particular to the Building services part of the Environment Agency's Energy Efficiency Horizontal Guidance Note H2;

- Maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Environment Agency's Energy Efficiency Horizontal Guidance Note H2.
- Ensure that the plant is operated and maintained in such a way as to eliminate wasteful practices and minimise the consumption of gas, electricity and water; and
- Undertake annual energy audits to identify opportunities for reducing energy consumption.

124. The Operator shall ensure that all plant listed in table 1 is operated and maintained to optimise the use and minimise the loss of energy.

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

126. The Operator shall calculate the following indicators of energy efficiently performance expressed as a ratio:

- kWh gas consumed v m² of goods produced.
- kWh electricity consumed v m² of goods produced

A summary of this information shall be provided to the Regulator by the 30 April each year.

127. In respect of energy efficiency, the Operator shall meet the requirement of either:

a) Climate Change Agreement (CCA), or
b) Direct Participation Agreement (DPA)

Prevention of Accidents

128. The Operator shall maintain a Health, Safety & Environment 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 identified to minimise these potential occurrences; and
- the actions to deal with such occurrences so as to limit their consequences.

The plan shall be reviewed at least every 2 years or as required after an accident and Regulator notified of the results of the review as part of its annual report.

A copy of the Health, Safety & Environment Plan shall be kept available for inspection.

Maintenance

129. Effective preventative maintenance shall be employed on all aspects of the process including all plant, buildings and the equipment concerned with the control of emissions to air, land or water. In particular there shall be:

- A Written maintenance, inspection and replacement programme for all aspects of the process shall be prepared, implemented and maintained.
- A record of any maintenance undertaken shall be kept and be made available for inspection to a duly authorised officer of the Regulator, on request.

130. The Operator shall identify and maintain an inventory of environmentally critical process and abatement equipment, whose failure could impact on the environment.

131. Processors and equipment identified in condition 129 above (except water) shall: -

- Be provided with alarms or other warning systems to indicate equipment malfunction or breakdown.
- Ensure warning systems are checked and maintained in accordance with manufacturer's recommendations.

132. Operational and maintenance procedures shall be updated from time to time as may be necessary to account for changes in working practices, plant and machinery, raw materials or processors. A copy of the revised procedures shall be kept and be made available for inspection to a duly authorised officer of the Regulator, on request.

133. Essential spares and consumables, particularly those subject to continual wear, shall be held on site when the supplier is not able to provide items from stock within one working day, so that plant breakdowns can be rectified rapidly.

134. A register of any breakdowns or malfunctions should be maintained by the Operator and shall be made available to an authorised officer of the Regulator upon request. The Operator shall regularly analyse and review this register to eliminate common/re-occurring failure modes.

Training

135. All staff with duties related to the control of emissions to the environment shall receive formal training which shall include awareness of the potential environmental impacts of the installation, how to deal with conditions likely to give rise to accidental emissions, action to minimise emissions during abnormal conditions, emergency procedures and reporting requirements**.**

136. The Operator shall maintain a statement of training requirements for each operational post and keep a record of the training received by each person. These documents shall be made available for inspection to a duly authorised officer of the Regulator on request**.**

Appropriate management Systems

137. The activity shall operate in accordance with an effective management system which has been certified to an independent standard. This shall include a commitment to achieving compliance with the permit conditions. It may include establishing objectives for improved environmental performance by setting targets, measuring progress and revising the objectives according to results. The system shall include managing risks under normal operating conditions and in accident and emergency situations.

138. The Operator shall undertake annual audits to ensure all activities at the installation are compliant with conditions detailed in this permit. The audit should include annual reporting on environmental performance, achievement of objectives and targets and details of any future planned improvements. Key elements will be included in the Operator's annual report submitted by 30th April each year.

Decommissioning the Installation

139. The Operator shall maintain and review a site closure plan for the site to prevent or minimise any pollution risk (including the generation of waste) from the closure or decommissions of the installation.

The plan shall include:

- A complete methodology to be adopted in the decommissions of the installation, to include:
  1. Removal of key plant or machinery likely to be contaminated.
  2. Removal of contamination associated with the plant and machinery.
  3. Minimising any contamination from the installation buildings during demolition.
  4. removal of contaminated subsurface infrastructure as may be necessary.

- An assessment of the impact of decommissioning on the nearest sensitive receptors.

- The preparation of a ground contamination report to include the testing of soil within the decommissioned installation to demonstrate contamination levels are no greater than those submitted in the Operator's application site reports.

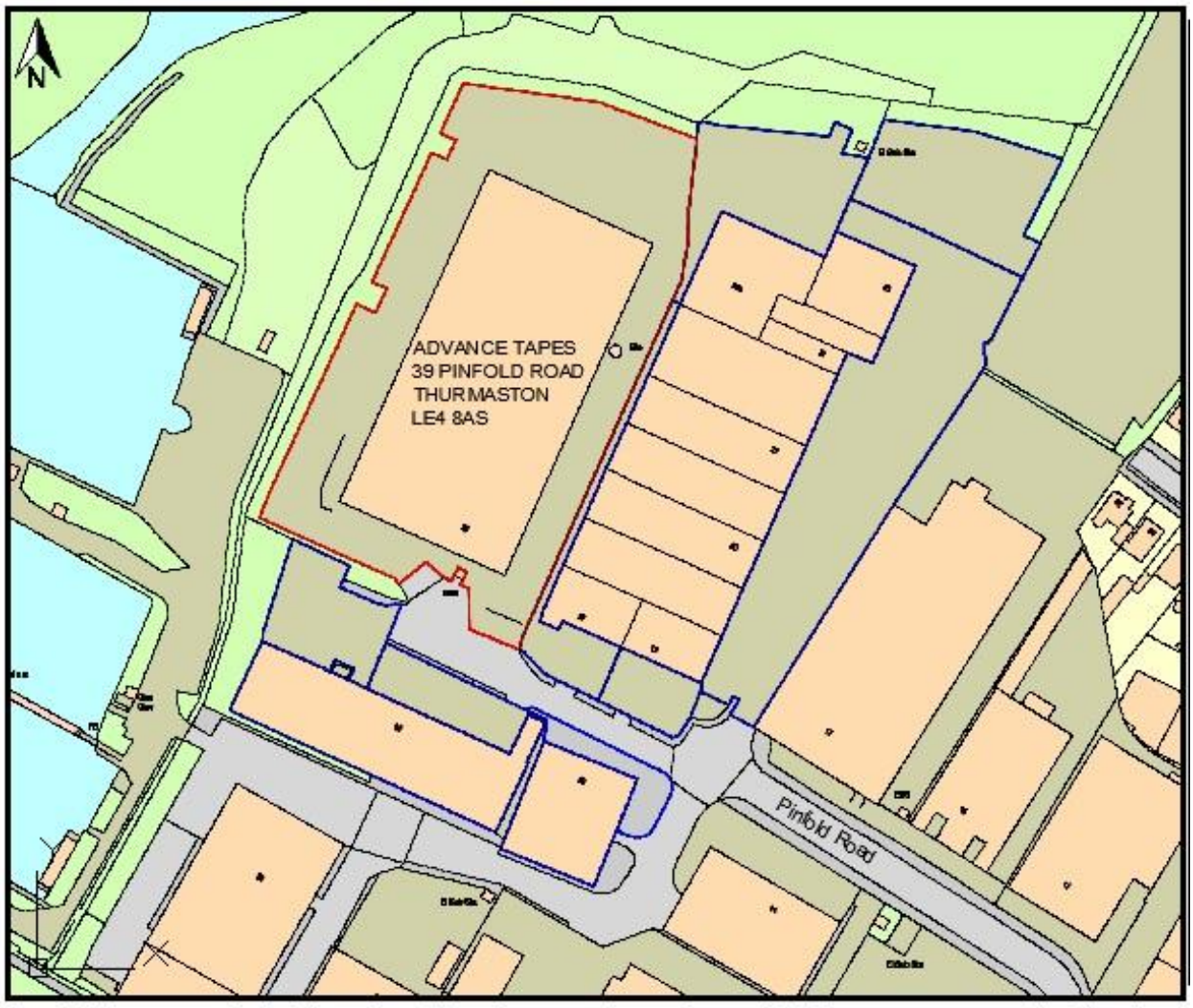
140. The Operator shall carry out a full review of the Site Closure Plan at least every 4 years.

141. The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.

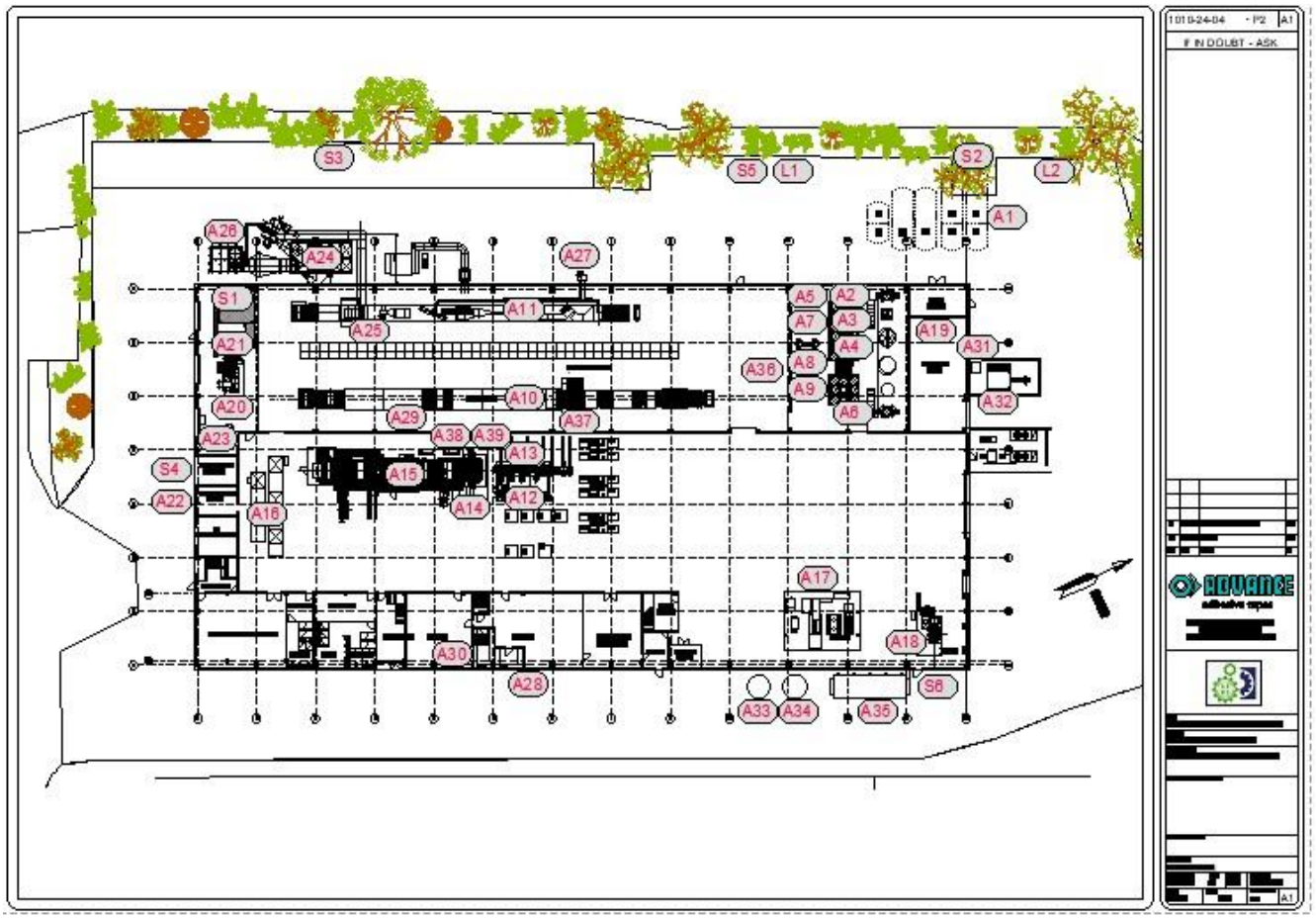
142. The Operator shall give at least 30 days written notice to the Regulator before implementing the site closure plan.

End of Conditions

Site Location **Appendix 1- A2/02**



Site Layout **Appendix 2- A2/02**



Appendix 3- A2/02

Summary of Reports /Submissions Required by Permit

Condition Ref	Nature of Repot/submission	Format	Date for Submission
2 & 6	Any change in operation, nature, functioning, or extension, of the installation, which may have consequences for the environment. This includes chimney, vents or process exhausts to atmosphere.	In writing	14 Days before
4	Annual extractive monitoring report of emissions to atmosphere from: Oxidiser Main Exhaust stack, Boiler flue, Lab Mixer flue, fume cupboard vent, Polymer prep dust collector outlet, Ozone extraction duct (Corona treatment unit), Dust collection outlet, Calendar Boules	3rd Party Report	30 April each year
8	Solvent Consumption calculation from installation (Annual Solvent inventory)	Annual Report	30 April each year
9	Solvent Management Report & calculation of fugitive solvent emissions	Annual Report	30 April each year
11, 12, 13 & 15	Register of substances or materials that have designated risk phrases. Where replacement is not possible annual report on how the Operator is controlling and limiting the use of these substances.	Annual Report	30 April each year
23	or damage to the foul sewer line, plus action plan.	Notification by email	Immediately
28	Results of annual non-continuous emission testing	Annual Report	30 April each year
32	Failure of oxidiser or operation in bypass for periods of greater than 24hrs	Notification by email	Within 12 hours
34 & 35	Notification of adverse monitoring results	Notification by email	Within 1 day where exceed limit Within 1 hr where twice limit
41	Annual summary of smoke and olfactory testing.	Annual Report	30 April each year
43 & 45	Abnormal events, plant failure resulting in emission that are likely to have an effect on the local community or a perceptible off-site impact	Notification by email	Immediately

88	Periodical review of cleaning operations involving organic solvents	Annual Report	30 April each year
92	Report on progress reducing solvent consumption per unit of output	Annual Report	30 April each year
102	Waste minimisation progress report	Annual Report	30 April each year
109	Annual summary of site noise testing at site boundary	Annual Report	30 April each year
114	Changes to the inventory of principle raw materials used	Annual Report	30 April each year
114	Review of principle raw materials used and impact on environment	Annual Report	30 April each year
115	Waste minimisation audit & action plan	Annual Report	30 April each year
116	Annual summary of performance on waste in relation to output	Annual Report	30 April each year
119	Record of monthly mains water usage	Annual Report	30 April each year
121	Summary of performance on water usage in relation to output	Annual Report	30 April each year
122	Annual report on energy consumption, and opportunities for reduction	Annual Report	30 April each year
126	Energy usage calculation per unit of output	Annual Report	30 April each year
128	Results of the review of the accident management plan	Annual Report	30 April each year
138	al audit of environmental performance, achievement of objectives and targets and details of any future planned improvements.	Annual Report	30 April each year
139	Notice to implement site closure Plan	In writing	30 days prior to commencement.

Explanatory Notes

These notes do not form a part of the permit but contains guidance relevant to it.

Inspections

Regular inspections will be made by officers of the Regulator (without prior notice), in order to check and ensure full compliance with this permit.

BAT (Best Available Techniques)

The Permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the implied condition that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Health and Safety at Work and Other Statutory Requirements

The responsibility you have under legislation for Health, Safety and Welfare in the workplace remains in force. In addition, the Permit does not relieve you of your obligations to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency, Building Regulations approval, or some Waste Disposal Licences.

Submission of Information

Note that the Permit requires the submission of certain information to the Regulator. In addition, the Regulator has the power to seek further information at any time under Regulation 60(1) EP Regulations provided that it acts reasonably.

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with Requirement 46(1) EP Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Regulator serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introduction will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Where the Operator intends to cease the operation of an installation (in whole or in part) The Regulator should be informed in writing, such notification must include the information specified in Regulation 24 or Regulation 25 and Part 1 of Schedule 5 of the EP Regulations.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Regulator considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit.

Annual Subsistence Fee

In accordance with Regulation 65(1) of the EPR Regulations the holder of a permit is required to pay a fee for the subsistence of the permit. This fee is payable annually on 1st April. You are advised that under the provisions of Regulation 22 of the EPR Regulations, if you fail to pay the fee due promptly, the Regulator may revoke the permit. You will be contacted separately each year in respect to this payment.

Talking to us

Please quote the Permit Number if you contact Charnwood Borough Council about this Permit. To give a Notification under Conditions 23 ,34,35,43 and 45 the Operator should use the email address: env.health@charnwood.gov.uk or telephone number 01509 634636 for that purpose. For notifications in writing please use the address on the front of this permit.

Appeals in relational to Environmental Permits

1. Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs within 6 months from the date of the permit issue.

2. Appeals must be made in accordance with the requirements of Regulation 31 and Schedule 6 of the EP Regulations and should be addressed as follows:

   The Planning Inspectorate
   Environment Team, Major and Specialist Casework
   Room 4/04 Kite Wing
   Temple Quay House,
   2 The Square,
   Temple Quay,
   Bristol, BS1 6PN

3. An appeal bought under Regulation 31(b) in relation to the conditions in a permit will not suspend the effect of the conditions appealed against: the conditions must still be complied with.

4. There are no forms or charges for appealing. However, for an appeal to be valid, appellants are legally required to provide information as detailed in paragraphs 2(1) and (2) of Schedule 6 of the EP Regulations., namely:

   I. A statement of the grounds of appeal
   II. A copy of any relevant permit
   III. A copy of any relevant correspondence between the appellant and the regulator

IV. A statement indicating whether the appellant wishes the appeal to be in the form of a hearing or dealt with by way of written representations.

5. In determining an appeal against one or more conditions, the Act allows the Secretary of Sate in addition to quash any of the other conditions not subject to the appeal, to direct the Regulator either to vary any of these other conditions or to add new conditions.