Charnwood Borough Council hereby permits, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010 (as amended)

ADVANCE TAPES INTERNATIONAL LTD,
whose registered office is:

WESTMORELAND AVENUE, THURMASTON, LEICESTERSHIRE. LE4 8PH.

To operate a coating and surface treating activity at:

ADVANCE TAPES INTERNATIONAL LTD

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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ann Green</td>
<td>02/11/15</td>
</tr>
</tbody>
</table>

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 the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010/675), as amended, (“the EP Regulations”) to operate an installation carrying out one or more of the 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**

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

**Superseded Licences/Authorisations/Consents relating to this installation**

<table>
<thead>
<tr>
<th>Holder</th>
<th>Reference No.</th>
<th>Date of Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Tapes International Ltd</td>
<td>036</td>
<td>14 March 1994</td>
</tr>
</tbody>
</table>

**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 6/18(11) Guidance for Paper Coating
**Process Description**

The installation manufactures a wide range of adhesive tapes primarily for use within the industrial sector. The range of tapes includes PVC and Polythene coated tapes (for example those used to mark out the courts in sports centres), double sided tape, fabric tape and foil tape (for example those used for sealing double glazing units).

Adhesives used in the process consist of water based (purchased from the supplier ready for use), solvent based (produced on site) and a 100% solids system, produced on site.

Solvents used in the process are stored in underground tanks, encased in concrete. During tape manufacture with the 100% solid system, a VOC release (conditioning) coat is applied to the back of the tape.

During tape manufacture, using the solvent based and 100% solids adhesive, the tape passes through drying ovens where the solvents are evaporated from the product. The evaporated solvent is directed to a solvent incinerator where any VOC’s are destroyed. The heat generated from this process is then utilised both in the drying ovens on the water based coating line and for heating the factory. Systems are in place so that the solvent based coating line automatically shuts down when there is a problem with the solvent incinerator. The contents of the air emissions are monitored and recorded on a regular basis.

**Raw Material**

Raw materials (synthetic and natural rubber) are milled and mixed with other ingredients including resins and powdered starch to produce a solvent free adhesive. The dust laden air is extracted via a fully enclosed dust extraction system.

**Adhesive Storage**

Manufactured adhesives and solutions used in the production of the final product are stored in a number of storage vessels prior to application (shown on the site layout in appendix 2) equipped with a vapour recovery system.

Manufacture of the release (conditioning) coat takes place in a designated area as shown on the site layout plan (appendix 2). Ingredients are dissolved in a solvent through mixing. Mixing occurs on a batch basis in the closed vessel. The mixture is then transferred to bunded holding tanks within the mixing room until required. Vapours from the mixing process are contained within a fully enclosed system with no emissions to atmosphere. When required the release coat is pumped to the Calender for application.

**Solvent Coating Activity**

The adhesive is applied to the substrate and the evaporating solvent is extracted and exhausted to atmosphere via the abatement plant.
Water Based Coating Activity

Water based adhesives, used in the process are purchased directly, ready for use. These products are supplied in 1000 litre IBC's which are stored within the confines of the building prior to use within the coating process.

Water based adhesives are applied using a number of techniques to silicon coated release papers, PVC or polythene substrates, from which the water carrier is then evaporated using a number of drying ovens. This water vapour is directed to a number of exhaust flues, which are then directed to a single exhaust stack before being emitted to atmosphere.

Fabric Coating Activity

Solvent free adhesive and organic-solvent based release (conditioning) coatings are applied to fabric and other substrates. The raw materials (synthetic and natural rubber) are mixed with other ingredients such as resins and powders in a full enclosed continuous mixer with the dust laden air being extracted via an enclosed extraction system. Adhesive is applied together with a coating and where applicable a release coating containing organic solvents. The evaporated solvents are directed to an incinerator where VOC’s are destroyed.

Where necessary the fabric is pre-coated with a 100% solids polyethylene coating on a separate coating line.

Fabric tape is produced in a Corona treatment machine complete with a generator and ozone exhaust. Ozone is used to ensure the keying of adhesive onto the product.

VOC Abatement

The thermal incinerator is responsible for the combustion of VOC emissions from the 2 coating lines, key coat application and drying areas, adhesive/catalyst mixing, applying and drying unit, the conditioning unit, flash off zones and ovens.

Solvent laden air is ducted directly in a single exhaust from the above areas to the incinerator. Exhaust air from the oxidiser is discharged to atmosphere via a 9.5 meter high stack.

The exhaust air is pre-heated via an integral heat exchanger before entering the main burner chamber, where gas is added to increase the fuel concentration of the mix. The air is held in the primary combustion chamber for sufficient time to ensure the complete destruction of pollutants.

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 the end of production each month.

Summary of technical data
**Manufacturer**
Durr Ecopure oxidiser

**Reference Number**
09361/33/98

**Brief description**
Single combustion chamber

**Flow rate**
28,000Nm$^3$/hr

**Exit air temperature**
430°C

**Combustion temperature**
730°C

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**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 scrap solvent adhesive, water based emulsion and other washings together with oil/grease. This is stored in a sealed area before removal by a licensed waste management company.

**Pilot and Development Plants**
The installation has the facility to develop new products prior to manufacture via a development area and pilot coating plant. This equipment is used for the development of either solvent or water based products. The pilot coating plant is equipped with a small oven connected to a single outlet stack although emissions are of water vapour only.

**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 incinerator 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**

<table>
<thead>
<tr>
<th>Source</th>
<th>Emission point ref:</th>
<th>Abatement</th>
<th>Location of emission point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Number A2/02</td>
<td>Page 5 of 35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store Description</td>
<td>Permit</td>
<td>Incinerator</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------</td>
<td>-------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Solvent storage tank farm</td>
<td>A1</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Mixer MX1</td>
<td>A2</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Mixer MX2</td>
<td>A3</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Mixer MX3</td>
<td>A4</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Mixer MX6</td>
<td>A5</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Mixer MX7</td>
<td>A34</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Keycoat Storage</td>
<td>A6</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Catalyst Storage</td>
<td>A7</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Adhesive Storage (IBC’s)</td>
<td>A8</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Drum storage</td>
<td>A9</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Coating plant Bypass stack</td>
<td>A10</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Oxidiser Main Exhaust Stack</td>
<td>A11</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Boiler flue</td>
<td>A12</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Pilot plant exhaust stack</td>
<td>A13</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Batch Range Lab Mixer Flue</td>
<td>A14</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Laboratory solvent wash off flue</td>
<td>A15</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Quality control fume cupboard vent</td>
<td>A16</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Polymer preparation dust collector outlet</td>
<td>A17</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Mixing room fugitive losses</td>
<td>A18</td>
<td>Incinerator</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Coating plant fugitive losses</td>
<td>A19</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Ozone extraction duct (Corona treatment unit)</td>
<td>A33</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Dust collector outlet</td>
<td>A35</td>
<td>Camfil Tenkay Reverse Jet Filter Unit</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>No 5 Plant cooling tower bleed and drainage</td>
<td>S36 (A36)</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Boiler blow down vessel</td>
<td>S1</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
<tr>
<td>Rainwater from</td>
<td>S4</td>
<td>None</td>
<td>Shown on layout plan ref EDW-1028</td>
</tr>
</tbody>
</table>
The installation boundary and key items of equipment mentioned in permit conditions are shown in the Appendices attached to this permit.

**End of Introductory Note**
The above named company is permitted to operate the activities and/or associated activities as specified in table 2 below:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description of specified activity</th>
<th>Limits of specified activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesive manufacture.</td>
<td>The storage of materials, mixing and manufacture of adhesives.</td>
<td>Receipt of raw materials to the dispatch of finished products in specified areas as detailed on site layout plan.</td>
</tr>
<tr>
<td>Coating of products.</td>
<td>The storage, application, drying or curing of coating material to products.</td>
<td>Receipt of raw materials to the dispatch of finished products in specified areas as detailed on site layout plan.</td>
</tr>
<tr>
<td>Storage and handling of raw materials including the bulk storage of solvents.</td>
<td>Storage of solid and liquid raw materials in underground and above ground storage tanks, bale or bags and IBC’s or drums.</td>
<td>Receipt and storage of raw materials to transfer, to batch preparation or other process areas.</td>
</tr>
<tr>
<td>Product drying.</td>
<td>Drying ovens to remove solvent carrier.</td>
<td>Product drying carried out in areas shown on site layout plan.</td>
</tr>
<tr>
<td>The storage and disposal of waste solvents and solvent contaminated wastes.</td>
<td>Handling, storage and disposal of wastes from the installation.</td>
<td>From the generation of the wastes to their final disposal off site.</td>
</tr>
<tr>
<td>Control and thermal oxidation of VOC’s for emissions to air.</td>
<td>Abatement of releases to air.</td>
<td>Extraction and collection of waste gases and treatment in Thermal oxidiser prior to release to atmosphere.</td>
</tr>
<tr>
<td>Effluent treatment.</td>
<td>Effluent collection, pH adjustment, agitation and analysis prior to discharge to sewer.</td>
<td>From drainage system to point of entry to sewer.</td>
</tr>
<tr>
<td>Processing of solid components.</td>
<td>Mixing, milling, blending of material prior to use.</td>
<td>Processing prior to use, particularly of rubbers.</td>
</tr>
<tr>
<td>Pre-mixing.</td>
<td>5 mechanical mixing vessels used for the preparation of solvent based coatings.</td>
<td>Processing prior to use within the Polymer Preparation Area as detailed in 0567/M/09</td>
</tr>
<tr>
<td>Water based coating process.</td>
<td>Storage and use of water based adhesives purchased directly from</td>
<td>Application of water based adhesives carried out in areas shown on site layout plan.</td>
</tr>
<tr>
<td>Development plant.</td>
<td>Development of new products prior to manufacture on main processing line. Includes small mixing area and pilot coating plant. Used for solvent or water based products.</td>
<td>Pilot plant is equipped with evaporation oven connected to a single outlet stack, shown on site layout plan.</td>
</tr>
<tr>
<td>Manufacture of release (conditioning)</td>
<td>Ingredients are dissolved in solvents through mixing.</td>
<td>Release coat is manufactured on site in areas shown on site layout plan.</td>
</tr>
</tbody>
</table>
Coatings. which occurs on a batch basis in enclosed mixing vessels.

| Storage of Release Coat in tanks. | Storage of finished produce in holding tanks until required. | Internal storage of conditioning coat, shown on site layout plan. |
| Storage of finished produce in holding tanks until required. | Internal storage of conditioning coat, shown on site layout plan. |
| Coating of fabrics with molten polythene. | Application via a separate coating line. | In specific areas as identified on site layout plan. |
| Product drying. | Drying ovens to remove solvent carrier. | Product drying carried out in areas detailed on 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 Charnwood Borough Council.

2. If the operator proposes to make a change in operation of the installation he shall, at least 14 days before making the change, notify Charnwood Borough Council 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**

<table>
<thead>
<tr>
<th>Emission point ref:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 – A9 Solvent storage tank Mixer MX1, 2, 3 &amp; 6 Keycoat Storage Catalyst Storage Adhesive Storage Drum storage</td>
</tr>
<tr>
<td>Parameter</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>VOC’s</td>
</tr>
<tr>
<td>Code</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>A34</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>A10</td>
</tr>
<tr>
<td>A11</td>
</tr>
<tr>
<td>A12</td>
</tr>
<tr>
<td>A13</td>
</tr>
<tr>
<td>A14</td>
</tr>
<tr>
<td>A15</td>
</tr>
<tr>
<td>A16</td>
</tr>
<tr>
<td>A17</td>
</tr>
<tr>
<td>A18</td>
</tr>
<tr>
<td>A19</td>
</tr>
<tr>
<td>A33</td>
</tr>
<tr>
<td>A35</td>
</tr>
</tbody>
</table>
**Calendar Boules**

To be agreed following emission testing in November 2015

Annual 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.** The VOC emission limit detailed above does not apply when the cloth coating line is operated in isolation. However the fugitive limit must not exceed the amount stated in table 3 above.

5. All emissions from Mixers MX1,2,3,6,& 7, pilot plant exhaust stack, lab mixer flue (ref A14), lab wash-off flue (ref A15) and mixing room exhaust shall be ducted to suitable abatement plant capable of meeting the emission limits required by condition 4.

6. The introduction of dilution air to achieve the emission concentration limits in these conditions is not permitted. However, the introduction of air to balance arrestment systems is acceptable.

7. No additional chimneys, vents or process exhausts which increase emissions of VOC’s to atmosphere shall be provided without the written consent of Charnwood Borough Council.

8. 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 and use of 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

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

**Determination of Solvent Consumption**

9. 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 Charnwood Borough Council 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 Plan**

10. A Solvent Management Plan (SMP) shall be produced annually by the operator and submitted to Charnwood Borough Council by 30 April. This shall be used to determine fugitive emissions from the installation required by Condition 4. The SMP shall cover the period of 1 January to 31 December of the previous year. The SMP shall be forwarded to Charnwood Borough Council annually. (Risk phrase solvents shall be recorded separately and not form part of this plan).

11. Total organic solvent emissions shall be calculated as described in the Solvent Management Plan 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**

12. 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 Charnwood Borough Council by 30 April.

13. 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 Charnwood Borough Council by 30 April.

14. 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 Charnwood Borough Council.
15. 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.

16. 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 Charnwood Borough Council by 30 April.

Emission Limits and Controls- Surface Water and Sewers

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

18. All discharges from this installation to the sewage system shall comply with the emission limits stipulated in table 4 below. The operator shall carry out compliance monitoring of the parameters detailed in table 4 at least once a year. A summary of the results shall be available upon request to an authorised officer of Charnwood Borough Council.

Table 4 – Emission Limits & Discharge Consent Criteria

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>limit</th>
<th>Emission point</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>As detailed in effluent discharge consent</td>
<td>S1,2,3,6 &amp; 7</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>As detailed in effluent discharge consent</td>
<td>S1,2,3,6 &amp; 7</td>
</tr>
<tr>
<td>Cooling Waters</td>
<td>As detailed in effluent discharge consent</td>
<td>S2, 6 , 7 &amp; 36</td>
</tr>
<tr>
<td>Temperature (°C)</td>
<td>As detailed in effluent discharge consent</td>
<td>S2, 6 , 7 &amp; 36</td>
</tr>
<tr>
<td>Physically separable, dispersed, emulsified or soluble oils, grease, particulates or polydimethylsiloxane</td>
<td>As detailed in effluent discharge consent</td>
<td>S1,2,3,6 ,7 &amp; 36</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>As detailed in effluent discharge consent</td>
<td>S1,2,3,6, 7 &amp; 36</td>
</tr>
<tr>
<td>Compounds of calcium, magnesium, Iron ,un-dissolved solids and solutions of Sulphites</td>
<td>As detailed in effluent discharge consent</td>
<td>S1</td>
</tr>
<tr>
<td>Corrosive inhibitors, Biocide treatments, Rust/scale</td>
<td>As detailed in effluent discharge consent. Weekly bleed not to exceed 454 litres (1050 litres for shutdowns after neutralising)</td>
<td>S2 &amp; S36</td>
</tr>
</tbody>
</table>

19. The effluent shall not contain any other substance or properties not listed in condition 18 above except with the prior written consent of an authorised officer of Charnwood Borough Council.
20. 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.

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

22. All effluent treatment plant e.g. interceptors, for the site shall be:
   - Impermeable,
   - Visually inspected monthly and;
   - Have an annual maintenance inspection.

   Prior to this inspection all contents shall be removed.

23. The operator shall identity the potential risk to the environment from drainage systems recorded under condition 20 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


25. The effluent transport system (including subsurface plant, equipment, tanks, drains, sewers, sumps or storage vessels) shall be inspected and surveyed at least once every five years for the following;
   - Establish a record of all sub-surface drains, sewers, plant, equipment, sumps or storage vessels to include the routing of all pipe work.
   - Produce an inspection and maintenance record for all sub-surface drains, sewers, plant, equipment, sumps or storage vessels which involves as necessary, pressure or leak tests, materials thickness checks or camera surveys

   Where an 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 Charnwood Borough Council shall be notified immediately.
Monitoring, Investigation and Recording

26. 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.

27. Records of all visual and olfactory assessments and of any remedial action taken shall be kept in a log book 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 made available to an authorised officer of Charnwood Borough Council on request.

28. 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 Charnwood Borough Council on request.

29. Charnwood Borough Council shall be advised at least 7 days in advance of any periodic monitoring exercise to determine compliance with emission limit values of the provisional time and date of monitoring pollutants to be tested and the methods to be used.

30. The results of all non-continuous emission testing shall be forwarded to Charnwood Borough Council within 8 weeks of the completion of the testing. The monitoring reports shall be submitted in both paper copy and electronic format. A summary of results of all continuous monitoring shall be retained at the installation for at least two years.

Continuous Monitoring of VOC Abated Releases

31. The Thermal Oxidation Plant shall be provided with continuous 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 730°C.

Continuous monitoring of carbon monoxide and incineration temperature shall be used as ‘surrogate’ measurement parameters to demonstrate compliance.
32. All continuous monitoring readings shall be on display to appropriately trained staff.

33. All continuous monitoring instruments shall be fitted with audible and visual alarms, situated to warn the operator of abatement plant failure or malfunction.

34. The activation of alarms shall be automatically recorded. Records of the activations shall be made available to an authorised officer of Charnwood Borough Council on request.

35. All instruments used for continuous monitoring shall be checked weekly and the information shall be downloaded on a weekly basis.

36. All continuous 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 Charnwood Borough Council on request.

37. All new continuous monitoring equipment shall be designed for less than 5% downtime over any 3-month period. A manual or automatic procedure shall be implemented to detect instrument malfunction and to monitor instrument availability.

38. Any failure or bypass of the thermal oxidiser allowing abnormal emissions shall be notified to Charnwood Borough Council within 24 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 27.

39. 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.

40. In the event of adverse results from any monitoring activity (both continuous and non continuous) 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 Charnwood Borough Council.
41. In any case where monitoring results exceed the emission limits specified in Conditions 4 and 18 above Charnwood Borough Council’s Environmental Protection Service shall be notified by phone within one day of the results being obtained. Where the emissions exceed twice the limit, Charnwood Borough Council shall be notified within 1 hour of the results being obtained.

42. The operator shall provide a list of key abetment plant and shall have a written plan for dealing with failure.

Visible and Odorous Emissions

43. 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 Charnwood Borough Council (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.

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

45. 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.

46. 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. The results of this review shall incude a BAT justification of the choices made. A summary of the BAT assessment shall be submitted to the LA together with a timescale to implement any necessary changes.

47. The Operator shall undertake an annual review of the airflows and solvent concentration to the thermal oxidiser to identify where further improvements can be made. An improvement programme together with the necessary timescale to implement the work should be forwarded to Charnwood Borough Council by the 30 April each year.
Abnormal Events

48. 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 27, the events and actions taken.

49. Charnwood Borough Council 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 catalytic oxidiser.

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

51. 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 the operator shall:

- identify the cause and take corrective action.
- record as much detail in the log book (condition 27) 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 Charnwood Borough Council immediately by telephone if the emission is likely to result in perceptible off-site impact.

52. 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 Charnwood Borough Council on request.

53. Where in the opinion of a duly authorised officer from Charnwood Borough Council, there is evidence of visible emissions from the process off-site; corrective action shall be taken immediately. If the source is uncertain the operator shall undertake an inspection and assessment, and where deemed necessary by Charnwood Borough Council, undertake ambient monitoring to
identify the process operations giving rise to the emission. The monitoring method shall be agreed with Charnwood Borough Council. Once the source is known, corrective action shall be taken without delay.

**Calibration and Compliance Monitoring**

54. 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 forwarded to Charnwood Borough Council at least 21 days prior to commencement of sampling, and testing shall not be commenced until the regulator approves the proposed test method in writing.

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.

55. 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.

56. For demonstration of compliance with the emission limits given in condition 4 where a continuous monitor (CEM) is used:

a) No daily mean of all 15-minute mean emission concentrations shall exceed the specified emission concentration limits during normal operation (excluding start-up and shut-down); **and**

b) No 15-minute mean emission concentration shall exceed twice the specified emission concentration limits during normal operation (excluding start-up and shut-down).

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

58. 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.

Emissions from Fixed Storage Tanks & Silos

59. 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 log book required by condition 27.

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

<table>
<thead>
<tr>
<th>Filter cleaning method</th>
<th>Frequency of inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silos with reverse jets - Phase 2</td>
<td>At least once a month</td>
</tr>
<tr>
<td>Silos with pulsed air</td>
<td>At least once a month</td>
</tr>
</tbody>
</table>

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

62. All silos 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 week or before each delivery, whichever is the longer interval and the results recorded in the log book detailed in condition 27.

63. Seating of pressure relief valves shall be checked at least once a week or before a delivery takes place whichever is the longer interval. Immediately, it appears that the valve may have become unseated, the delivery shall cease and no further delivery shall take place until the problem is rectified. The valve shall be examined and re-seated or a replacement fitted if necessary. Tanker drivers shall be informed of the correct procedure to be followed.

64. 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 27.
65. No particulate emissions shall be visible during silo filling activities. If emissions of particulate matter are visible from ducting, pipe-work, 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.

66. 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.

67. During delivery from tankers, the venting to air to the silo shall be at a limited rate to avoid pressurisation of the silo. Particular 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.

**Raw Material Storage**

68. The receipt, handling and storage of organic solvents and other raw materials shall be carried out so as to minimise noise, spillage, leaks, dust and the emission of volatile organic compounds or particulate matter.

69. Storage areas shall be under cover and protected from the elements to avoid or minimise environmental impact.

70. Storage areas shall be hard surfaced.

71. 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 the bunded area.

72. All bulk storage tanks 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 week or before each delivery, whichever is the longer interval and the results recorded in the log book detailed in condition 27.

73. 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.

74. All VOC storage containers, whether full, partly full or empty, shall be stored within bunded enclosed areas, except for point of use containers. The bunding shall be impervious, resistant to liquids and capable of holding 110% of the capacity of the largest stored container.
75. All drummed materials and bulk 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 log book.

76. All raw materials and wastes shall be stored in designated areas. All designated areas shall be capable of containing the raw materials and waste contained therein and prevent overflow into surrounding areas. Where damage occurs to containment for these 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.

77. 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 log book required to be kept by condition 27.

78. Any accumulation of waste or raw materials found outside of the designated area shall be considered a spillage and shall be dealt with in accordance with the requirements of condition 85.

Handling Techniques

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

80. All mixing, emptying and transfer of coatings or raw materials containing VOC’s shall be undertaken in covered or closed containers.

81. 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 bunded area.

82. The pipe work associated with transfer of solvents 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 storage tanks, IBC’s or the pipe work. The connections 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.

83. Exhaust ventilation from coating application zones shall be vented to the Thermal oxidiser.

84. The 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.

85. 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)**

86. 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.

87. 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 Charnwood Borough Council within eight weeks of it being completed.

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

89. 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.

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

**Operational Controls**

91. 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.

92. In direct fired curing and drying ovens temperatures within the ovens shall be thermostatically controlled to minimise emissions.

**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 on a monthly basis, particularly where corrosive substances are involved. These inspections should be included in the maintenance schedule required by conditions 129 and copies stored with the log book required to be kept in accordance with condition 27.

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 Local authority 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 the raw materials detailed in tables or descriptions submitted in response to Section B2.4 of the application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact. Carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the LA within 2 months of completion of each such audit and a review of the audit and a description of progress made against the plan shall be submitted to the LA at least every 4 years thereafter.

102. The Operator shall annually review alternatives for the principle types of raw materials used with regard to their environmental impact.

**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 and the collected material held in an enclosed container pending removal from site.
104. All arising of dry dusty materials 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 15m/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 Charnwood Borough Council.

**Noise Emissions**

109. The operator shall:

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

- Annually review the noise survey of the installation such that any changes to the plant or equipment noted above are identified and the survey updated appropriately.

- Devise and implement a noise management plan based on the survey which shall include the following:
  
  a) A statement of policy with regard to dealing with noise.
  
  b) A documented complaint procedure for the investigation, analysis, determination and solution to noise problems.
  
  c) Details of routine maintenance undertaken in particular to deal with noise issues.

- Construct a register of complaints regarding noise emissions from the installation.

All documentation required to be produced by this condition, shall be retained in the log book required to be kept in accordance with condition 27.
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 manufactures’ 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. For the purpose of this condition ‘minimal’ shall be taken to mean that, the plant or equipment, if monitored under requirements of BS 4142:2014, has a rating level of -10dB (when compared to the background level), or is otherwise inaudible.

- 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 Charnwood Borough Council and shall demonstrate BAT.

112. In the event of Charnwood Borough Council 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 Charnwood Borough Council, 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 Charnwood Borough Council 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. The inventory shall be submitted to Charnwood Borough Council 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 Charnwood Borough Council every 4 years.

- 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 Charnwood Borough Council annually or where such information is requested every four years from the date of issue of the permit. All information shall be retained by the operator and kept with the log book required to be kept in accordance with condition 27.

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

The operator shall carry out a waste minimisation audit every 4 years. The methodology used and an action plan for optimising the use of raw materials shall be submitted to Charnwood Borough Council within 2 months of completion of the audit.

Specific improvements resulting from the recommendations of the audit shall be carried out within a timescale approved by Charnwood Borough Council.
The operator shall provide to Charnwood Borough Council by the 30 April each year an annual summary of performance on waste minimisation. This summary should include:

- Tonnes of VOC consumed v tonnes of goods product.
- Tonnes of wastes produced v tonnes of goods product.
- Volume of ‘clean water consumed v tonnes of goods product.

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.

Every two years the operator shall investigate potential markets for the recovery/re-use of wastes that are currently disposed of to landfill. A summary of this investigation and outcomes identified shall be recorded and made available to authorised officers of Charnwood Borough Council upon request.

**Water Usage**

The operator shall measure the monthly volume of mains water used in the installation. All measurements should be recorded and retained with the log book. An annual summary of this record shall be forwarded to Charnwood Borough Council by the 30 April each year.

The operator shall carry out a water efficiency audit every 4 years to identify opportunities to reduce water usage. Specific improvements resulting from the recommendations of the audit shall be carried out within a timescale approved by Charnwood Borough Council.

The operator shall provide to Charnwood Borough Council by the 30 April each year an annual summary of performance on water usage.

**Energy Efficiency**

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.

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 within 4 weeks of submitting the information required by condition 122 also calculate the following indicators of energy efficiently performance expressed as a ratio:

• Gas consumed v tonnes of goods produced.
• Electricity consumed v tonnes of goods produced.

A summary of this information shall be shall provide to Charnwood Borough Council 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 produce an 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.

The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the LA notified of the results of the review within 2 months of its completion.

A copy of the accident management plan shall be kept with the log book required to be kept by condition 27.

**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 Charnwood Borough Council, 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 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 manufacturers 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 Charnwood Borough Council, 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 Charnwood Borough Council upon request. The operator shall regular 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 Charnwood Borough Council on request.

Appropriate management Systems

137. The activity shall operate in accordance with an effective management system which has been certified to the International Environment Management Standard ISO14001: 2004. This shall include a commitment to achieving compliance with the permit conditions and ensuring LAPC considerations are taken account of in the day-to-day running of the process. 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.

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 operators 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 Charnwood Borough Council before implementing the site closure plan.

End of Conditions
Site Location

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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 Charnwood Borough Council (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 Local Authority (LA). In addition, the LA 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 LA 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 LA 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 LA 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, Charnwood Borough Council 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 10 and 14 the Operator should use the telephone number 01509 634636 or any other number notified in writing to the Operator by Charnwood Borough Council 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 State in addition to quash any of the other conditions not subject to the appeal, to direct the local authority either to vary any of these other conditions or to add new conditions.