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# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Heathcoat Fabrics Limited

Tiverton Textile Manufacturer Westexe Tiverton Devon EX16 5LL

#### Variation application number

EPR/BM2772IK/V006

#### **Permit number**

EPR/BM2772IK

## **Tiverton Textile Manufacturer Permit number EPR/BM2772IK**

#### Introductory note

#### This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

This variation authorises the following changes to the Permit:

- Addition of an odour abatement system on the Dipping Unit Stenter, creating a new emission point to air, A15.
- Table S1.1 has been updated to remove discharge point W3 and emission points to air A6 and A8 to reflect current operations and emission point to air A10 is removed from the permit following decommissioning of the Santex unit.
- Table S1.1 has been amended to reflect the operations on site by including the following activity; Section 5.4 A(1) (a)(i) Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day involving biological treatment.

Tiverton Textile Manufacturer, operated by Heathcoat Fabrics Limits is located on a 7.6 Ha site, in Tiverton, Devon. The site is centred on National Grid Reference SS 952E 127N.

The main activities at the facility comprise of dyeing and finishing textiles as described in Section 6.4 A(1)(b) in part 1 of schedule 1 of the Environmental Permitting (England and Wales) Regulations 2010: pre-treating (by operations such as washing, bleaching or mercerisation) or dyeing fibres or textiles in plant with a treatment capacity of more than 10 tonnes per day.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit				
Description	Date	Comments		
Application BM2772 (EPR/BM2772IK/A001)	Received 25/07/02	Duly Made 26/07/02		
Response to request for information	Request dated 01/10/02	Response dated and received 30/01/03		
Request to extend determination	Request dated 13/03/03 for extension to 26/05/03.	Request accepted 25/03/03		
Permit issued EPR/BM2772IK	22/05/03	Permit issued to John Heathcoat & Company Limited.		
Variation application	Duly made			

Status log of the permit				
Description	Date	Comments		
EPR/BM2772IK/V002	28/08/08			
Schedule 5 notice for further information	16/10/08	Response received 28/11/08		
Variation issued EPR/BM2772IK/V002	28/01/09	Varied permit issued		
Agency led variation determined EPR/BM2772IK/V003	14/11/11	Agency initiated variation issued.		
Variation application EPR/BM2772IK/V004	Duly made 30/11/11			
Variation issued EPR/BM2772IK/V004	01/03/12	Varied permit issued.		
Agency led variation determined EPR/ BM2772IK/V005	26/02/14	Agency variation to implement the changes introduced by IED.		
Application EPR/BM2772IK/V006 (variation and consolidation)	Duly made 23/02/15	Application to vary and update the permit to modern conditions. Addition of an odour abatement system onto Dipping Unit A12 stenter, creating a new emission point to air, A15.		
Variation determined EPR/BM2772IK/V006 PAS/Billing Ref: DP3133WW	21/05/15	Varied and consolidated permit issued in modern condition format.		

End of introductory note

#### Notice of variation and consolidation

#### The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

#### **Permit number**

EPR/BM2772IK

#### Issued to

**Heathcoat Fabrics Limited** ("the operator")

whose registered office is

Westexe

**Tiverton** 

Devon

**EX16 5LL** 

company registration number 00450787

to operate a regulated facility at

**Tiverton Textile Manufacturer** 

Westexe

**Tiverton** 

Devon

**EX16 5LL** 

to the extent set out in the schedules.

The notice shall take effect from 21/05/15

Name	Date
Tom Swift	21/05/2015

Authorised on behalf of the Environment Agency

#### Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

#### Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

#### **Permit**

#### The Environmental Permitting (England and Wales) Regulations 2010

#### **Permit number**

#### EPR/BM2772IK

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BM2772IK/V006 authorising,

Heathcoat Fabrics Limited ("the operator"),

whose registered office is

Westexe

**Tiverton** 

Devon

**EX16 5LL** 

company registration number 00450787

to operate an installation at

**Tiverton Textile Manufacturer** 

Westexe

Tiverton

Devon

**EX16 5LL** 

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Tom Swift	21/05/2015

Authorised on behalf of the Environment Agency

#### **Conditions**

#### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

#### 1.2 Energy efficiency

- 1.2.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

#### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

## 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive: and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

#### 2 Operations

#### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

#### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in red on the site plan at schedule 7 to this permit.

#### 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

#### 2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

#### 3 Emissions and monitoring

#### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2, S3.3 and S3.4.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Where a substance is specified in schedule 3 tables S3.2 or S3.3 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.
- 3.1.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.4.3 Emergency generators / alarms / sirens / release valves shall only be tested between the hours of 10:00 and 17:00 Monday to Friday and not on any public holiday.

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1, S3.2 and S3.3;
  - (b) surface water or groundwater specified in table S3.4;
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3 and S3.4 unless otherwise agreed in writing by the Environment Agency.

#### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

#### 4.2 Reporting

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

- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

#### 4.3 Notifications

- 4.3.1 In the event:
  - (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately—
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

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

Where the operator is a registered company:

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

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
  - (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

#### 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately, in which case it may be provided by telephone.

## **Schedule 1 – Operations**

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
Section 6.4 A(1) b Pre-treatment by washing, bleaching and dyeing of textiles in plant with a treatment capacity of more than 10 tonnes per day.	Washing bleaching & dyeing of textiles	Batch fabric dyeing, scouring and mechanical de-watering
Section 5.4 A(1) (a)(i) Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day involving biological treatment	The biological treatment of effluents resulting from the processing of textiles.	From generation of waste water from the listed activities to discharge of treated effluent to the Leat at point W1
Section 5.4 A(1) (a)(ii)  Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day involving physico-chemical treatment	The physico-chemical treatment of effluents resulting from the processing of textiles.	From generation of waste water from the listed activities to discharge of treated effluent to the Leat at point W1
Directly Associated Activity		
Combined Heat & Power Plant & Boiler room plant	Providing electrical, heat & steam power to the installation.	Outputs are limited to heat, electricity & steam and combustion by- products including boiler blowdown at release point A1 & A9 & W2 respectively of attached site plan in schedule 7. Boilers shall be fired by either mains gas or Light Fuel Oil (LFO).
Chemical storage and distribution areas	Receipt and storage of fabric, raw materials and utilities	Storage in dedicated storage areas prior to use in the installation
Textile preparation & finishing	Batch preparation and batch fabric finishing	The preparation of various textiles and application of various finishes to them, emissions via various release points A2, A3, A11-A15 of attached site plan in schedule 7.
Water treatment plant	The treatment of abstracted water prior to use within the installation	The water softener regeneration water to the Leat at point W2 respectively of attached site plan in schedule 7.
Engineering workshops & on-site laboratories	Maintenance of machinery & storage of oils for use within the installation.	Any fugitive releases of oils & chemicals discharge to sewer from laboratory at point W6 of attached site plan in schedule 7.
Waste management handling & treatment facilities	Waste handling & storage facilities including sludge treatment & storage areas	The safe storage of wastes prior to their eventual re-cycling or disposal.

Table S1.2 Operating techniques				
Description	Parts	Date Received		
Application EPR/BM2772IK/V004	The response to questions 2.1 and 2.2 and given in pages 1-19 of Section b2.1 and pages 1-8 of Section B2.2.	25/07/02		
Response to Schedule 4 notice dated 01 October 2002.	The responses to questions 1-2.8 and question 2.10.	30/01/03		
Variation application EPR/BM2772IK/V002	The responses given in C2.1 & C2.2.	25/07/08		
Response to Schedule 5 Notice (16/10/08) for further information (AG/065)	All	28/11/08		
Variation application EPR/BM2772IK/V004	All	30/11/11		
Various updates to operating techniques agreed in writing by the Environment Agency, covering the period 2005 to 2011and submitted as part of the application for variation EPR/BM2772IK/V004	All	30/11/11		
Variation application EPR/BM2772IK/V006	Parts C2 and C3 of the application documents and all supporting information.	22/01/15		
	Monitoring data for new emission point A15.	20/02/15		
	H1 risk assessment for A15	23/02/15		
	Updated site plan.	21/05/15		

Table S1.3	Table S1.3 Improvement programme requirements				
Reference	Reference Requirement				
IC1	The Operator is to install the continuous monitoring equipment required for monitoring of emission point W1 as detailed in table 2.2.5.	Complete			
IC2	The Operator is to supply the updated extracts from the installations EMS covering Accidents and their Consequences in accordance with the requirements as detailed within sections 2.8.3/4/5 of the Sector Guidance Note for BAT for such procedures and include the requirements of condition 2.2.6.1(fire water retention).	Complete			
IC3	The arrangements described in Section 2.3.3, 2.3.5 and 2.3.6 shall be in place within 2 months of the issue of the permit and the Operator shall inform the Agency of compliance within 4 weeks of their achievement	Complete			
IC4	The site closure plan described in Section 2.11.2 shall be submitted	Complete			
The Operator is to produce a report on the feasibility of moving towards the benchmark emission limits for discharge to water of 20:30mg/l (BOD: SS), by the application of BAT within the effluent treatment plant (ETP) by the date shown unless otherwise agreed in writing with the Agency.		Methodology and scope to be agreed within 6 months from date of variation issue EPR/BM2772IK/V006			
	The study should address the current issues of flow balancing and composition of the influent arriving at the ETP as well as the adequacy of current levels of treatment within the ETP. The findings of this study and a time-scale for implementation of its	21/05/15 Report & recommendations			

Reference	Requirement	Date
	recommendations shall be submitted to this Agency in writing.	within 18 months from date of variation issue EPR/BM2772IK/V006 21/05/15
IC6	A best practicable environmental options study for waste disposal shall be submitted as described in Section 2.6.2 This study shall look at all options for sludge and cropping dust disposal including off site composting possibilities.	Complete
IC7	The Operator must complete the noise survey at the boundaries and at sensitive receptor locations as detailed within section 2.9 a) to e) of the Schedule 4 notice issued to the Operator, dated 01 October 2002.	Complete
IC8	The Operator is to establish an approved chemicals and raw materials database to enable existing stocks to be cross -checked in accordance with the Raw materials purchasing procedures. These procedures should be designed so as to minimise adverse environmental impact with reference to section 2.4 of the Guidance (e.g. biodegradability, bioaccumulation and toxicity).	Complete
IC9	The operator shall monitor all stack release points associated with combustion, for instance, gas burners for the concentration and mass releases rates of oxides of nitrogen and carbon dioxide. This monitoring shall be repeated annually as part of the annual maintenance schedule for all such burners. A report on the monitoring shall be sent to the Environment Agency within 2 months following its completion.	Complete
IC10	The operator shall carry out a BAT study on the CHP plant to confirm that release concentrations of oxides of nitrogen and carbon dioxide are minimised. A report on the study shall be sent to the Environment Agency	Complete
IC11	The operator shall carry out an assessment of odour following the guidance contained in draft IPPC Horizontal Guidance Note ~H4 for Odour, or any more up to date guidance available at the time. The scope of this work shall be agreed in writing with the Environment Agency before commencing and will cover all potential emission points including the Stenter emissions. A report on the above shall be send to the Agency, including a time-scale for implementing any recommendations to prevent any such releases continuing.	Complete
IC12	The operator shall carry out full air dispersion modelling of the following releases from the installation: i) combined NOx releases from all sources ii) NOx and CO release from CHP plant iii) Formaldehyde, ammonia and mineral oil release from stenter stacks, The aim of the modelling shall be the compare the maximum ground level impacts with the appropriate air quality standards. A report on the modelling shall be sent to the Environment Agency.	Complete
IC13	The Operator shall undertake representative sampling of the effluent release to water at release point W1 at least 2 times during the year at approximately 6 monthly intervals. Each of the samples shall be analysed for metals (including Chromium, Cobalt, Copper, Lead, mercury, Nickel, Tin and Zinc).  Of these 2 samples (see * below), 1 that has been taken during high cotton throughput should also be tested for trace pesticides (including Alpha-Cypermethrin, Chlorpyriphos, DDT, Deltamethrin,	Complete

Reference	Requirement	Date
	Endosulphan, HCB, Lambda-Cyhalothrin, and PCP and it's compounds).	
	*Alternatively, cotton fabric raw materials may be tested at a frequency to give at least an equally robust dataset or at least once during each year. The results and process throughput shall be analysed such that releases of trace pesticides (including Alpha-Cypermethrin, Chlorpyriphos, DDT, Deltamethrin, Endosulphan, HCB, Lambda-Cyhalothrin, and PCP and it's compounds) to water shall be defined.	
	The Operator shall submit, in writing to the Agency, a report defining the releases of the above substances based on the monitoring.	
IC14	The Operator shall submit a report in writing to the Agency containing a review of the raw materials used and the type, method of application, usage, quantities and frequency of flame retardant, including, but not limited to, decabromodiphenylether and hexabromocyclododecane.	Complete
	The report shall describe the method of the review of usage, and contain assessments of the concentration and quantity of each flame retardant released to the environment (including to sewer).  The report shall also present the results and conclusions of the assessments, including a review of BAT for minimising releases together with any recommendations for improvements and a timescale for implementation.	
IC15	The operator is to conduct an investigation into sources of ammonia, Formaldehyde and iron emissions within the process and within the effluent treatment plant prior to emission point W1. This study should appraise options for reducing these emissions at source and via the treatment process and its management. The findings of this study and a time-scale for implementation of its recommendations shall be submitted to this Agency in writing.	Complete
IC16	The Operator is to investigate the possible environmental impacts from the fate and behaviour of both silver and nano silver particles in the effluent treatment plant final effluent and the associated sludge as a result of application processes at the installation. The investigation must identify and use the most appropriate monitoring techniques for both silver and nano silver in the final effluent and the associated sludge. The findings of this study and a time-scale for implementation of its recommendations shall be submitted to this Agency in writing. The study should refer to both the Defra voluntary reporting scheme and EU Reach regulations.	Complete
IC17	The Operator shall draw up a detailed action plan to address issues of odorous emissions from the various on site stenter ovens affecting nearby residents. The action plan shall include but not be limited to the scope of proposed actions as outlined in a letter to the Environment Agency, dated 4th November 2011 (reference: AG/118/EPR). The action plan shall be submitted to the Environment Agency for approval and shall include dates for completion of all proposed actions.	Complete

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Light Fuel Oil	Less than 0.1% sulphur content

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method [Note 1]
A1 [Point A1 on site plan in Schedule 7] NGR SS 9516 1281	CHP Stack (14.7m)	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	No limit set		Once in a rolling 4 year programme	BS EN 14792
		Carbon Monoxide	No limit set		Once in a rolling 4 year programme	BS EN 15058
A2 [Point A2 on site plan in	Krantz Stenter	Total VOC	150 mg/m <sup>3</sup> [Note 2]	30 minute mean	Annual	BS EN 12619
schedule 7] NGR SS 9513 1285	Stack (14.0m)	Formaldehyde	20 mg/m <sup>3</sup>	30 minute mean	Annual	BS EN 13649
1203		Oil Mist	No limit set		Annual	BS EN 13284-1
A3 [Point A3 on site plan in schedule 7] NGR SS 9516 1287	L Stenter Stack (11.0m)	No parameters identified	No limits set			
site plan in Sta	Boiler Stack (35.0m)	Oxides of Nitrogen (NO and NO2 expressed as NO2)	No limit set		Once in a rolling 4 year programme	BS EN 14792
		Carbon Monoxide	No limit set		Once in a rolling 4 year programme	BS EN 15058
A11 [Point A11 on site plan in schedule 7] NGR SS 9517 1289	Gas Fired Boiler	Products of combustion	No limits set			
A12 [Point A12 on site plan in schedule 7] NGR SS 9519 1290	Dipping Unit	Total VOC	150 mg/m <sup>3</sup> [Note 2]		Once in a rolling 4 year programme	BS EN 12619
		Formaldehyde	20 mg/m <sup>3</sup>		Once in a rolling 4 year	BS EN

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method [Note 1]
					programme	13649
		Oil Mist	No limit set		Once in a rolling 4 year programme	BS EN 13284-1
A13 [Point A13 on site plan in schedule 7] NGR SS 9512 1295	H Stenter	Total VOC	150 mg/m <sup>3</sup> [Note 2]	30 minute mean	Annual	BS EN 12619
		Formaldehyde	20 mg/m <sup>3</sup>	30 minute mean	Annual	BS EN 13649
		Oil Mist	No limit set		Annual	BS EN 13284-1
A14 [Point A14 on site plan in schedule 7] NGR SS 9519 1292	Tumbler	Total VOC	150 mg/m <sup>3</sup> [Note 2]	30 minute mean	Annual	BS EN 12619
		Oil Mist	No limit set		Annual	BS EN 13284-1
A15 [Point A15 on site plan in schedule 7]	Unit Abatement - Stack	Total VOC	75 mg/m <sup>3</sup> [Note 2]		Annual [Note 3]	BS EN 12619
		Formaldehyde	20 mg/m <sup>3</sup>		Annual [Note 3]	BS EN 13649
		Oil Mist	No limit set		Annual [Note 3]	BS EN 13284-1

Note 1: See Condition 3.5.4. Monitoring methods are to be as stated or in accordance with Agency Guidance M2-Monitoring of stack emission to air, unless otherwise agreed in writing with this Agency.

Note 3: Annual requirement until otherwise agreed with the Environment Agency.

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit) [Note 3]	Reference Period*	Monitoring frequency	Monitoring standard or method [Note 1]
W1 on site plan in schedule 7	Effluent Treatment Plant	Biochemical Oxygen Demand (BOD)	25 mg/ml	Spot Sample	Weekly	BS EN 1899-1
emission to Leat of River Exe		Total suspended solids at 105°C	35 mg/ml	Spot Sample	Weekly	SCA Book 105 ISBN -11751957X
NGR SS		Temperature	30°C	Continuous	Continuous	-
9525 1275		рН	6-9	Continuous	Continuous	BS ISO 10523
		Ammonia	15 mg/ml	Spot Sample	Weekly	BS 6068-2.11
		Anionic & Non-	5 mg/l	Spot	Monthly	SCA analysis of

Note 2: Total VOC expressed as total carbon, excluding particulate matter.

Table S3.2 Point Source emissions to water (other than sewer) and land - emission limits and monitoring requirements **Emission** Source **Parameter** Limit Reference Monitoring Monitoring standard or point ref. & (incl. Period\* frequency location unit) method [Note 1] [Note 3] surfactants in ionic detergents Sample in total waters, waste waters and sludges:1993 (used for anionic surfactants) by manual acid/alkali extraction Colour measured 0.1 nm Spot Monthly SCA blue book in absorbance Sample **103 ISBN** units over the 0117519533 range of 400-800nm 3,600 24-hour Total daily Continuous MCERTS selfm<sup>3</sup>/day volume of total monitoring of discharge effluent flow scheme MCERTS self-150 Daily discharge Continuous Continuous m<sup>3</sup>/hour rate monitoring of effluent flow scheme Visible oils and No Visual Daily greases significant Check trace As contained No limit 6 monthly Note 2 within the set dangerous substance list to include metals (incl. Chromium, cobalt, copper, lead, mercury, nickel, silver, tin and zinc) Formaldehyde No limit Monthly NM1 Spectrophotometer set instrumentation method Phosphates as No limit --Monthly BS EN ISO 15861-Orthophosphates set No limit Monthly BS 6068: 1998 Iron set W2 on site Boiler Biochemical 40 mg/ml 24 hour Monthly BS EN 1899-1 plan in blowdown, Oxygen Demand composite (BOD) sample schedule 7 water emission to softener re-Total suspended 24 hour SCA Book 105 60 mg/ml Monthly generation Leat of solids at 105°C composite ISBN -11751957X and water River Exe sample treatment NGR SS filter --30°C Spot Temperature Monthly

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. unit) [Note 3]	Reference Period*	Monitoring frequency	Monitoring standard or method [Note 1]
9515 1270	backwash			sample		
		pH	6-9	24 hour composite sample	Monthly	BS ISO 10523
		Visible oils and greases	No significant trace	Visual Check	Daily	
		Ammonia	No limit set	24 hour composite sample	Monthly	BS 6068-2.11
W4 on site plan in schedule 7 emission to Leat of River Exe tail race NGR SS 9525 1279	Discharge from main car park oil interceptor	Visible oils and greases	No significant trace	Visual Check	Daily	
W5 on site plan in schedule 7 emission to Leat of Discharge from waste storage area oil interceptor	Total suspended solids at 105°C	60 mg/ml	Spot sample	Annual	SCA Book 105 ISBN -11751957X	
	area oil PH	рН	6-9	Spot sample	Annual	BS ISO 10523
River Exe tail race NGR SS 9522 1276	and fire pump overflow	Visible oils and greases	No significant trace	Visual Check	Weekly	

<sup>\*:</sup> spot samples, reported as flow weighted monthly averages following installation of continuous flow recorder in accordance with Improvement Condition 6.1.1.0.

Note 1: or other equivalent methods as agreed in writing with the Environment Agency.

Note 2: the exact details of the list to be sampled and the methodology are to be agreed in writing prior to the monitoring taking place and in relation to Improvement Condition 6.1.1.12.

Note 3: where no limit is set refer to condition 3.1.3.

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site- emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
W6 on site plan schedule 7 emission to South West Water	Textile laboratory trade effluent and domestic sewerage	No parameters identified	No limits set			

Table S3.4 Surface water or groundwater monitoring requirements				
Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Boreholes BH1/2, BH2/2, BH3/1 As shown on site plan in schedule 7.	Hydrocarbons and metals suite identified in Table 10.1 of site report 51696/R1	6 monthly	As detailed within site report 51696/R1	None
	Settled Chemical Oxygen Demand (COD)	6 monthly	ISO 6068-2.34 (ISO 6060)	None
	рН	6 monthly	BS ISO 10523	None

1278

NGR SS 9518

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Oxides of nitrogen as NO <sub>2</sub> mg/m <sup>-3</sup>	A1, A9	4 yearly	01/01/09
Carbon Monoxide mg/m <sup>-3</sup>	A1, A9	4 yearly	01/01/09
Total VOC mg/m <sup>-3</sup>	A12	4 yearly	01/01/09
Formaldehyde mg/m <sup>-3</sup>	A12	4 yearly	01/01/09
Oil Mist mg/m <sup>-3</sup>	A12	4 yearly	01/01/09
Total VOC mg/m <sup>-3</sup>	A2, A15	Annually	01/06/15
Formaldehyde mg/m <sup>-3</sup>	A2, A15	Annually	01/06/15
Oil Mist mg/m <sup>-3</sup>	A2, A15	Annually	01/06/15
Ammonia mg/ l <sup>-1</sup>	W1, W2	Every 3 months	01/01/09
Biochemical oxygen demand mg/ I <sup>-1</sup>	W1, W2	Every 3 months	01/01/09
Suspended solids mg /l <sup>-1</sup>	W1, W2	Every 3 months	01/01/09
	W5	Annually	01/01/09
рН	W1, W2	Every 3 months	01/01/09
	W5	Annually	01/01/09
Temperature	W1, W2	Every 3 months	01/01/09
Anionic & non-ionic detergents	W1	Every 3 months	01/01/09
Colour measured in absorbance units	W1	Every 3 months	01/01/09
Flow	W1	Every 3 months	01/01/09
Orthophosphates	W1	Every 3 months	01/01/09
Iron	W1	Every 3 months	01/01/09
Formaldehyde	W1	Every 3 months	01/01/09
Oils & Grease	W1, W2, W4	Every 3 months	01/01/09
	W5	Annually	01/01/09
Boreholes	BH1/2, BH2/2, BH3/1	Every 6 months	01/01/09

Table S4.2: Annual production/treatment		
Parameter	Units	
Annual treatment of textile fibres	tonnes	

Table S4.3 Performance parameters			
Parameter	Frequency of assessment	Units	
Water usage	Annually	tonnes	
Energy usage	Annually	MWh	

Table S4.4 Reporting fo	Table S4.4 Reporting forms			
Media/parameter	Reporting format	Date of form		
Air	Form air 1 or other form as agreed in writing by the Environment Agency	21/05/15		
Water and Land	Form water 1 or other form as agreed in writing by the Environment Agency	21/05/15		
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	21/05/15		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	21/05/15		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	21/05/15		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	21/05/15		
Waste Return	Form R1 or other form as agreed in writing by the Environment Agency	21/05/15		

#### Schedule 5 - Notification

These pages outline the information that the operator must provide.

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

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

#### Part A

Permit Number	EPR/BM2772IK
Name of operator	Heathcoat Fabrics Limited
Location of Facility	Tiverton Textile Manufacturer, Westexe, Tiverton, Devon, EX16 5LL
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution			
To be notified within 24 hours of	detection		
Date and time of the event			
Reference or description of the location of the event			
Description of where any release into the environment took place			
Substances(s) potentially released			
Best estimate of the quantity or rate of release of substances			
Measures taken, or intended to be taken, to stop any emission			
Description of the failure or accident.			

(b) Notification requirements for the breach of a limit			
To be notified within 24 hours of detection unless otherwise specified below			
Emission point reference/ source			
Parameter(s)			
Limit			
Measured value and uncertainty			
Date and time of monitoring			
Measures taken, or intended to be			

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless othe	rwise specified below
taken, to stop the emission	
Time periods for notification following detection of a bi	each of a limit
Parameter	Notification period
(c) Notification requirements for the detection of any si	gnificant adverse environmental effect
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	
Part B – to be submitted as soon as	s practicable
Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	
Name*	
Post	
Signature	

Date

<sup>\*</sup> authorised to sign on behalf of the operator

#### Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"background concentration" means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

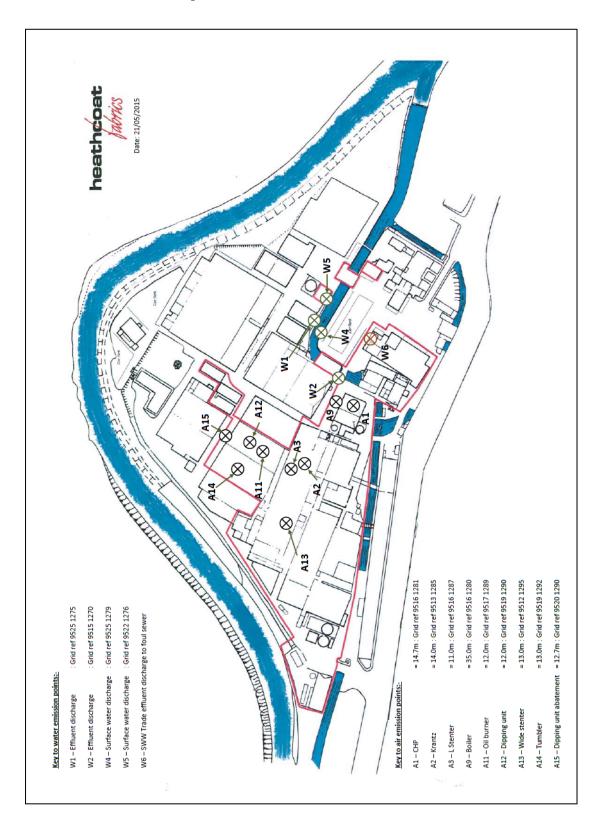
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels, 15% for gas turbines; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

"year" means calendar year ending 31 December.

### Schedule 7 – Site plan



#### **END OF PERMIT**