



# Environmental Permit

Pollution Prevention and Control Act 1999

Environmental Permitting (England and Wales) Regulations 2016

***Sonoco Thermosafe  
Unit 4, Tring Industrial Estate  
Icknield Way  
Tring,  
Hertfordshire,  
HP23 4JX***

Regulated activity:  
**Di-isocyanate Processes**

Permit Number:  
**DBC/EP/113**

**Permit Issued By:**

Environmental and Community Protection  
Environmental Health  
Dacorum Borough Council  
The Forum  
Marlowes  
Hemel Hempstead  
Hertfordshire  
HP1 1DN

Tel: 01442 228000

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***The address for all correspondence in relation to this Permit***

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Holder	Reference	Date of Issue
Sonoco ThermoSafe	DBC/EP/113	16/09/2022
Sonoco ThermoSafe	DBC/EP/113draft	20/05/2022

## **Introductory Note**

*These introductory notes are not Environmental Permit conditions, however, they do provide useful information about the Environmental Permitting Regulations:*

The following Environmental Permit, 'the permit' is granted by Dacorum Borough Council, 'the regulator', under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016 (Statutory Instrument 2016 No. 1154) as amended, ("the EPR") to carry out an activity, or activities covered by the description in Section 4.1 B (a) of Part 2 of Schedule 1 of the EPR, to the extent authorised by the permit.

Conditions within this permit detail Best Available Techniques (BAT) for the management and operation of the installation to prevent, or where that is not practicable, to reduce emissions.

In determining BAT, the operator should pay particular attention to relevant sections of the LAPPC Process Guidance Note (PG6/29(12)) and any other relevant guidance. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Note that the permit requires the submission of certain information to the regulator and in addition the regulator has the power to seek further information at any time under Regulation 61 of the EPR provided that the request is reasonable.

## **Public Registers**

Information relating to permits, including the application, is available on public registers in accordance with the EPR. Certain information may be withheld from the public registers where it is commercially confidential, or if it is in the interest of national security to do so.

## **Variations to the Permit**

The regulator may vary the permit in the future by serving a variation notice on the operator. Should the operator want any of the conditions of the permit to be changed a formal application must be submitted to the regulator (the relevant forms are available from the regulator). The Permitting History (foot of page i) includes a summary of the permits and variations issued up to that point in time and state whether a consolidated version of the permit has been issued.

## **Transfer of the permit or part of the permit**

Before the permit can be wholly or partially transferred to another operator, an application to transfer the permit has to be made jointly by the existing and proposed operators. A transfer will not be approved if the regulator is not satisfied that the proposed permit holder will be the person having control over the operation of the installation, or will not comply with the conditions of the transferred permit. In addition, if the permit authorises the operator to carry out a specified waste management activity the transfer will not be approved if the regulator does not consider the proposed permit holder to be a 'fit and proper person' as required by the EPR.

## **Talking to us**

Please quote the permit number if you contact the regulator about this permit. To give a notification under conditions in this permit, the operator should use the contact details on the cover of this permit.

## Description of the installation and regulated activity

*This description of the installation and the regulated activity are not environmental permit conditions, however, they do provide useful information about the installation and the activities undertaken. It also provides a reference point in relation to any substantial or non-substantial changes.*

**Laminar Medica Limited** trading as **Sonoco ThermoSafe** is permitted to carry out the activity of the use of di-isocyanate or partly polymerised di-isocyanate in the production of rigid polyurethane foam panels to form part of temperature controlled packing solutions.

The raw materials comprising methyl di-isocyanate (IsoPMDI 92140) and polyol resin (Elastopor<sup>®</sup> H 2070/9/HE1) are delivered to site in separate 1,200kg (1.2 tonne) intermediate bulk containers (IBCs) and stored immediately adjacent to the polyurethane foam panel manufacturing line.

The storage and manufacturing area is a dedicated area of the existing factory and warehouse facility and has no drainage. IBCs that are not in use are stored on racking but are not situated on, or within bunds. The IBCs containing the di-isocyanate and the IBCs containing the polyol resin that are in use are stored on bund trays.

A dedicated pump for the polyol resin and another for the di-isocyanate draw the chemicals from their individual IBCs into a 'dosing' unit that ensures the correct volume of each is delivered to the pouring gun. At this stage the two chemicals are not yet mixed. The delivery from the IBCs, via the pumps and dosing unit, to the pouring gun is within a closed system of flexible hosing/tubing.

The 'dosing' unit operates on a programmed cycle to ensure that the correct quantities of chemicals are drawn down from the two IBCs and then delivered to the pouring gun for delivery into the corrugated cardboard lined mould.

There is no separate blowing agent product because it, Solstice LBA (Trans- 1-chloro-3,3,3-trifluoropropene), is contained within the polyol resin product.

Only at the instance of pouring are the polyol resin and the di-isocyanate mixed to form the polyurethane. Once pouring is complete (approximately 60 seconds to fill one mould) the mould is closed, clamped and the polyurethane product allowed to set (30 minutes). The process is carried out at ambient temperature with no heating or cooling required.

In the absence of any spray application of the polyurethane mix and the minimal time period over which the mould is left open there is no provision of either active or passive venting and as a result there are no stack/vent emission points.

There is one pouring gun serving 6 (six) moulds at any one time. The pouring gun is manually cleaned on a monthly basis in a well ventilated area using solvent. The minimal volume of solvent used (estimated 20litres per year) is such that no extraction is required.

Once set the polyurethane product is removed from the mould, passed through quality control and despatched to the customer. There is no cutting or alteration of the finished product, if the product doesn't pass quality control it is disposed of to landfill.

Empty IBCs are stored on site and returned to the supplier when new product is delivered.

Permit



Permit Reference Number:  
**DBC/EP/113**

**Dacorum Borough Council**, 'the regulator' in exercise of its powers under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016 No.1154) as amended, hereby authorises **Sonoco ThermoSafe**, ("the operator")

To operate an installation at:

**Sonoco ThermoSafe**  
**Unit 4, Tring Industrial Estate**  
**Icknield Way**  
**Tring**  
**Hertfordshire,**  
**HP23 4JX**

The operator is authorised to carry out the following activities\* to the extent authorised by and in accordance with the conditions contained in this permit

- Di-isocyanate Processes, Section 4.1 B (a) of Part 2 of Schedule 1 of the EPR 'organic chemicals' activities.

And the following associated activities:

- Receipt, storage and handling of raw materials
- Cleaning of plant and equipment
- Storage of waste materials

To the extent authorised by and subject to the conditions of this Permit.

This permit shall be subject to replacement, variation or amendment as may be considered appropriate by Dacorum Borough Council, at any time, according to the provisions of Regulation 20 of the EPR.

*\* Nothing in this Permit grants or implies any consent under the Town and Country Planning Act. Also, it must not be taken to replace any responsibilities that you may have under Workplace Health and Safety legislation.*

Signed:



David Carr (Lead Scientific Officer)  
Authorised to sign for Dacorum Borough Council

Dated this day

**16<sup>th</sup> September 2022**

## **CONDITIONS**

*The following Environmental Permit conditions are legal requirements.*

### **General**

1. The installation shall, subject to the conditions of this Permit, be operated using the techniques, and in the manner described in the documentation submitted in the Permit application, or as otherwise agreed in writing by the Regulator in accordance with the conditions of this Permit.
2. The best available techniques shall be used to prevent or where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the activity which is not specifically regulated by any condition of this permit.
3. A copy of this permit shall be available at the installation and all relevant staff shall be made aware of its content and from where it can be viewed.
4. An appropriate person shall be appointed as the primary point of contact with the regulator. The regulator shall be informed in writing of the appointed person and in the event of a different person being appointed, the regulator shall be informed within 14 days.
5. If the operator proposes to make a change to the operation of the installation, they must, at least 14 days before making the change, notify the regulator on the appropriate form. The notification must contain a description of the proposed change in operation. A 'change in operation' means a change in the nature or functioning, or an extension of the processes within the permitted installation, or of the permitted installation itself, which may have consequences for the environment.
6. No operational change shall be made until agreed in writing by the Regulator. From the implementation date, the Operator shall operate the permitted installation in accordance with that change, and the relevant provisions of the application shall be deemed to have been amended.

### **Extent of the installation**

7. The activities authorised by this Permit shall not extend beyond the installation boundary; that being the land shown as edged in red on the site plan in Schedule 1. The layout of the installation is detailed in the site plan in Schedule 2.

### **Materials usage**

8. The operator shall keep a record of the annual usage of di-isocyanates (in kg) and make it available for inspection by the regulator.

## **Emissions and monitoring**

9. There shall be no emissions of odour or visible emissions beyond the site boundary detailed in Schedule 3 as perceived by the Regulator.
10. Any other releases to air, other than condensed water vapour, should be free from persistent visible emissions.
11. All emissions should be free from water droplets.
12. The operator shall carry out daily visible and olfactory assessments of the exterior of the permitted installation and shall note:
  - a. Date and time of the assessment
  - b. Weather conditions
  - c. The findings
  - d. Any action required
  - e. The name of the person carrying out the assessment
13. In the event of visible or olfactory emissions being observed, immediate action shall be taken to determine the cause and resolve the issue responsible for the emission and where necessary abate the emission.
14. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions, the Operator shall:
  - (a) Investigate and undertake remedial action immediately, and
  - (b) Adjust the process or activity to minimise those emissions, and
  - (c) Promptly record the events and actions taken and report them to the Regulator.
15. The Regulator shall be informed without delay if there is an emission that is likely to have an effect on the local community.
16. Emissions to air from the installation shall be monitored for the parameters and at the monitoring frequency set out in Table 1 of this Permit.
17. The monitoring requirements and frequency specified in Table 1 shall be re-assessed where in the opinion of the Regulator the:
  - (a) results of the monitoring required by Table 1
  - or
  - (b) scale of the permitted activities increases sufficiently to
  - or
  - (c) where the nature of the permitted activities changes sufficiently to

warrant a change in requirements to demonstrate and ensure compliance with the emission limits in Table 1.

<b>Table 1: Emission limits and monitoring</b>			
<b>Substance</b>	<b>Monitoring point</b>	<b>Emission Limit</b>	<b>Monitoring requirements and frequency</b>
Di-isocyanate as total NCO group	Ambient air in polyurethane (PUR) manufacturing area	0.1mg/Nm <sup>3</sup> averaged over any 2-hour period whilst the plant is in operation	One off occupational health monitoring to be undertaken within 3 months of the start of operation of the PUR manufacturing process, during a period representative of peak operation of that process
	Personnel monitoring in PUR manufacturing area	LTEL* = 0.02mg/m <sup>3</sup> STEL** = 0.07mg/m <sup>3</sup>	
Volatile organic compounds (expressed as carbon excluding particulate matter)	Point of emission to the atmosphere	100mg/m <sup>3</sup> as a 30 minute mean	Annual extractive testing – Not currently applicable to the permitted activity
Particulate matter		50mg/Nm <sup>3</sup>	

\* = 8hr time weighted average (TWA) reference period \*\* = 15 minute reference period (EH40-WEL (2020))

18. The reference conditions for emission limits shall be 273.1K, 101.3kPa, without correction for water vapour content.
19. The introduction of dilution air to achieve emission concentration limits shall not be permitted.
20. The Operator shall notify the Regulator at least **7 days** before any periodic or non-continuous monitoring exercise to determine compliance with emission limit values. The Operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.
21. A report of the results of non-continuous emission testing shall be forwarded to the Regulator within **8 weeks** of completion of the sampling. Adverse monitoring results shall be reported **without delay**, and investigated in accordance with Condition 23.
22. Adverse results from any monitoring activity (whether continuous or non-continuous) shall be investigated by the Operator as soon as the monitoring data has been obtained. The operator shall:
  - (a) Identify the cause and take corrective action, and
  - (b) Clearly record as much detail as possible regarding the cause and extent of the problem and the action taken, and
  - (c) Re-test to demonstrate compliance as soon as possible; and inform the Regulator of the steps taken and the re-test results.

### **Control techniques**

23. The receipt, handling and storage of di-isocyanates and other potentially odorous or harmful substances shall be carried out in such a way that emissions are prevented, or where not practicable due to process characteristics, are minimised and rendered harmless.
24. Di-isocyanates and polyol resins stored in IBCs shall be stored according to the manufacturer's recommended storage temperatures and allowed to acclimatise to working temperatures before use. These containers shall not be pressurised. All such containers, whether full, partially empty, or empty shall be kept securely lidded.



25. All di-isocyanates and polyols shall be kept in the IBCs in which they were delivered and shall be located in the PUR manufacturing area (permitted installation area – Schedule 1) on un-damaged, impermeable flooring that is without drainage.
26. All IBCs that are in use shall be stored on, or within, bunding that is sealed and resistant to the chemicals in storage and that is capable of holding 110% of the capacity of the largest storage container it serves, or 25% of the total capacity of all the tanks within the bund, whichever is the greatest.
27. Any vents serving containers, bulk storage tanks or mixing vessels should be fitted with a silica gel or other suitable air dryer to prevent ingress of water vapour. The air intake should be separate to the exhaust vent to avoid isocyanate reacting with water on the silica gel to form insoluble polyureas.
28. The transfer of materials between the IBCs and from the pump unit to the pouring gun shall only be via an enclosed transfer system.
29. Any solvents used for cleaning should be kept in enclosed containers whilst not in active use.
30. Wiping cloths or brushes should be impregnated with cleaning solvent in a controlled manner, using a dispenser or similar device.
31. Used wiping cloths or brushes should be stored in enclosed containers pending recovery or disposal.
32. Empty di-isocyanate IBCs, polyol resin IBCs and solvent containers shall be sealed and stored on an impermeable surface with no drainage prior to collection for appropriate disposal or re-use.
33. There shall be no cutting or equivalent finishing of the PUR foam product.
34. A written procedure for dealing with spillages shall be agreed with the regulator.
35. Where spillages of liquid occur they shall be immediately contained and cleaned up, with contaminated material being held in a suitable container prior to appropriate disposal.
36. Suitable and sufficient provision of spillage kit(s) shall be available at all times.
37. A high standard of housekeeping shall be maintained.

### **Maintenance**

38. The pump unit, delivery hosing and pouring gun shall be maintained in accordance with a written maintenance programme.
39. Visual checks of the pump unit, delivery hosing and pouring gun shall be made at the start and finish of each shift. Any damage shall be reported and where necessary scheduled for repair before operating.

40. A record of maintenance that has been undertaken shall be kept and upon request be made available to the Regulator.

### **Training**

41. All staff whose functions could impact on air emissions from the activity shall receive appropriate training on those functions. This shall include:
- (a) Awareness of their responsibilities under the permit, and;
  - (b) Steps that are necessary to minimise emissions during start up and shut down, and;
  - (c) Actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.
42. The Operator shall maintain a statement of training requirements for each post with the above mentioned functions and keep a record of the training received by each person. These documents shall be made available to the Regulator on request.

### **Management Techniques**

43. Appropriate policies and procedures shall be in place to ensure the effective management of the environmental performance of the installation and compliance with the permit conditions.

### **Reporting and notifying**

44. The Operator shall give written notification as soon as practicable (and at least 30 days) prior to any of the following:
- (a) Permanent cessation of the operation of part or all of the Permitted Installation;
  - (b) Cessation of operation of all or part of the Permitted Installation for a period likely to exceed 1 year; and
  - (c) Resumption of the operation of the part or all of the Permitted Installation after a temporary cessation of activities as above.
45. The Operator shall notify the following matters to the Regulator in writing within 14 days of their occurrence:
- (a) Any change in the Operator's trading name, registered name or registered office address;
  - (b) Any change to the particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary);
  - (c) Any steps taken by the Operator going into administration, entering into a company voluntary arrangement, being wound up, or bankruptcy.

### **Record Keeping**

46. All records required to demonstrate compliance with any conditions of this Permit shall be kept in an organised manner. The records shall be kept electronically or in paper form. Records shall:
- (a) Be made available for inspection by the Regulator at any reasonable time;
  - (b) Be supplied to the Regulator on demand and without charge;
  - (c) Be legible;

- (d) Indicate any amendments which have been made and shall include the original record wherever possible; and
- (e) Be retained at the Permitted Installation, or other location agreed by the Regulator in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

47. Any record not held on site shall be made available for inspection within one working week of any request by the Regulator.

## Interpretations and Explanatory Notes

*These interpretations and explanatory notes does not form part of your Environmental Permit conditions, however they do provide useful information about the Environmental Permitting Regulations:*

In relation to this Permit, the following expressions shall have the following meanings:

<i>“Activity”</i>	An activity listed in Part 2 of Schedule 1 to the EP Regulations which will form part of an EP installation or be a mobile plant
<i>“The EPR / EP Regulation”</i>	Means the Environmental Permitting (England and Wales) Regulations 2016 S.I. 2016 No.1154 (as amended) and words and expressions defined in the EPR shall have the same meanings when used in this Permit save to the extent they are explicitly defined in this Permit.
<i>“Change in Operation”</i>	In relation to an installation or mobile plant, a change in its nature or functioning or an extension, which may have consequences for the environment.
<i>“Enforcement notice”</i>	A notice served by a local authority to enforce compliance with the permit conditions or require remediation of any harm following a breach of any condition.
<i>“Installation”</i>	A stationary technical unit where one or more activities listed in Part 2 of Schedule 1 to the EP Regulations are carried out and any other location on the same site where any other directly associated activities are carried out. and any activities that are technically linked. The terms ‘regulated facility’ and ‘installation’ are, in effect, interchangeable for A(2) and B activities.
<i>“Operator”</i>	The person who has control over the operation of the installation/regulated facility (EP Regulation 7).
<i>“Permit”</i>	A permit granted under EP Regulation 13 by a local authority allowing the operation of an installation subject to certain conditions.
<i>“Pollution”</i>	Any emission as a result of human activity which may be harmful to human health or the quality of the environment, cause offence to any human senses, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment (EP Regulation 2(1)).
<i>“Revocation notice”</i>	A notice served by the Regulator under EP regulation 22 revoking all or part of a permit.
<i>“Permitted Installation”</i>	Means the activities and the limits to those activities described in this Permit.
<i>“Monitoring”</i>	Includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.
<i>“MCERTS”</i>	Means the Environment Agency’s Monitoring Certification Scheme.
<i>“Fugitive Emission”</i>	Means an emission to air or water (including sewer) from the Permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.
<i>“Regulator”</i>	Means any officer of Dacorum Borough Council who is authorised 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(1) of that Act.
<i>“Best Available Techniques (BAT)”</i>	Best available techniques means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent, and where that is not practical, generally to reduce emissions and the impact on the environment as a whole. For those purposes: "Available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator; "Best" means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole; "Techniques" includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques.

Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the document with the most recent publication date shall be taken to be the most appropriate document to be used.

Any person who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be received by the Secretary of State no later than 6 months from the date of the decision (the date of the Permit).

Appeals relating to installations in England should be received by the Secretary of State for Environment, Food & Rural Affairs. The address is 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 PN

The appeal must be in the form of a written notice or letter stating that the person wishes to appeal and listing the condition(s) which is/are being appealed against. The following five items must be included;

- (a) A statement of the ground of appeal;
- (b) A copy of any relevant application;
- (c) A copy of any relevant Permit;
- (d) A copy of any relevant correspondence between the person making the appeal (“the appellant”) and the Council;
- (e) A statement indicating whether the appellant wishes the appeal to be dealt with.
  - By a hearing attended by both parties and conducted by an inspector appointed by the Secretary of State;
  - or
  - By both parties sending the Secretary of State written statements of their case (and having the opportunity to comment upon one another’s statements).

At the same time, the notice of appeal and documents (a) and (e) must be sent to the Council, and the person making the appeal should inform the appropriate Secretary of State that this has been done.

- An appeal will not suspend the effect of the conditions appealed against; the conditions must still be complied with.
- In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority to either vary any of these conditions or to add new conditions.

# Schedules

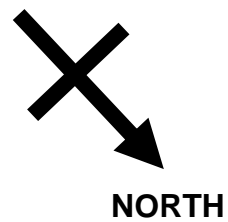
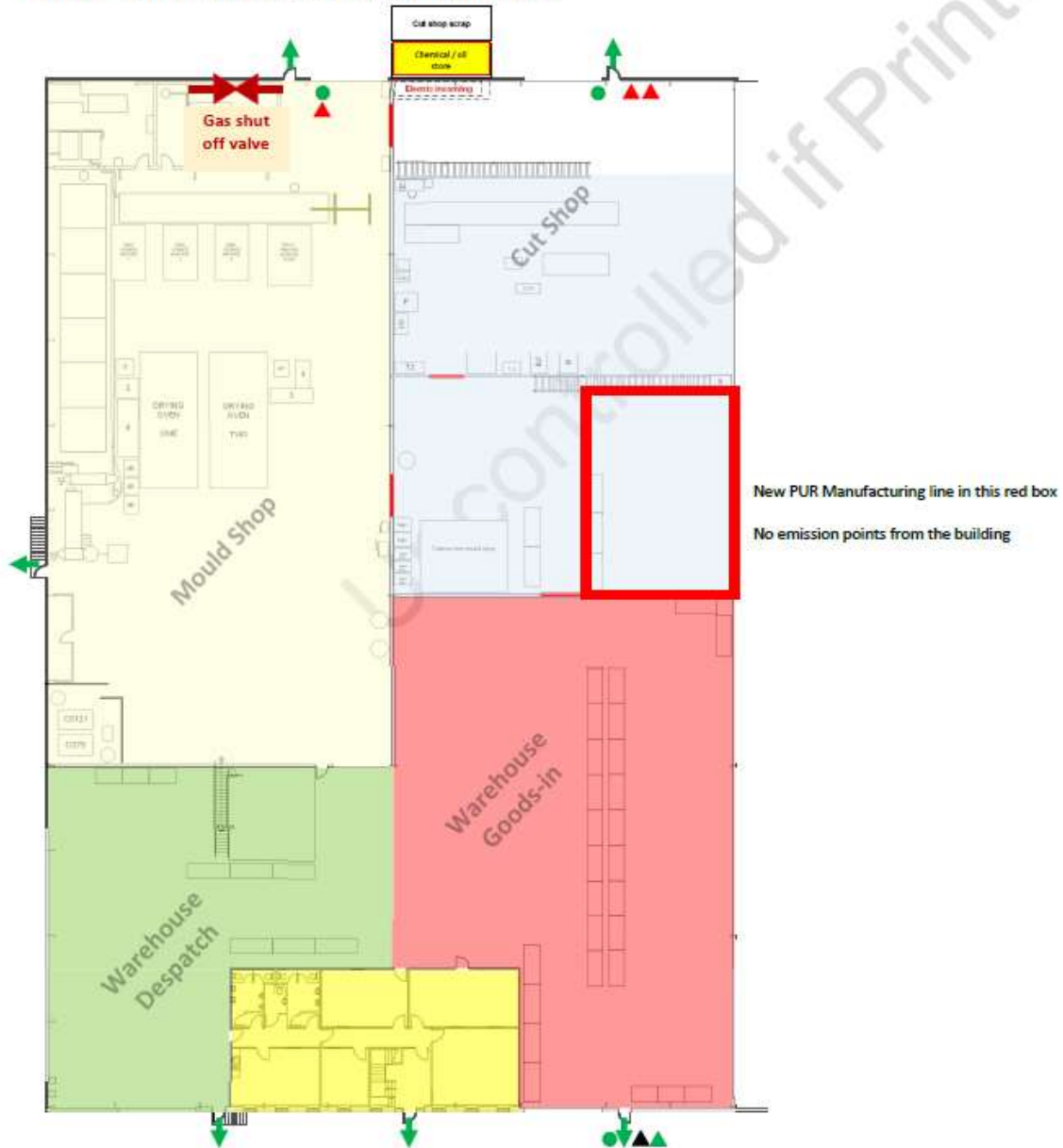
## Schedule 1 – Site Installation Plan



HSF101  
FIRE SAFETY SITE PLANS

ISSUE NO.: 3  
DATE: AUGUST 15  
PAGES: 1 OF 1

### UNIT 4 FIRE ZONES & FFE LOCATIONS

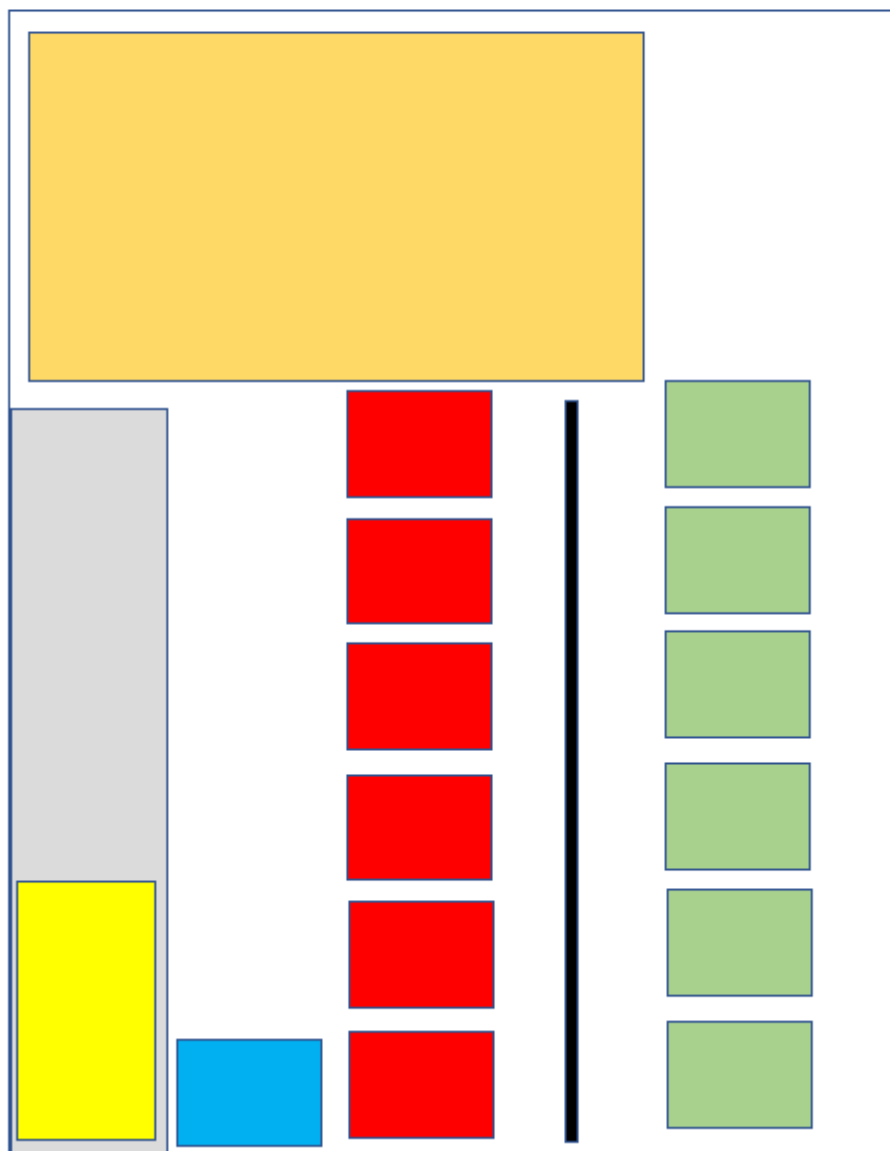


## Schedule 2 – Installation Layout Plan

### Sonoco ThermoSafe Tring – Unit 4 PUR line layout

No drains or emission points with the area at all

- Light Grey – racking for IBC's of raw materials
- Yellow – Bunds for "in use" IBC's
- Blue – Pump unit
- Light Orange – are for check weighing and assembly
- Black line – over head gantry to support hose and filling gun
- Light green – initial 6 mould tools
- Red – further 6 tools at a later date



**Schedule 3 – Site Location Plan**

