

## PERMIT

### Pollution Prevention and Control Act 1999

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

**Permit Reference: B22/11**

Huntingdonshire District Council (the regulator) hereby permits Xaarjet Ltd Science Park Cambridge CB4 0XR to operate a surface cleaning process as defined in Part 2 of Schedule 1 to the EP Regulations Section 7 and as described below in accordance with the following conditions which shall apply forthwith.

Address of permitted activity: Xaarjet Ltd  
1 Hurricane Close  
Huntingdon  
PE29 6XX

Location plan can be seen on B22/11B(a) Location plan

### Description of Activity

Xaar produce high quality inkjet printer heads for use in OEM printers.

All print heads are tested using inks and before shipment are required to be cleaned; some of the inks used are solvent based and therefore require a solvent to carry out this process.

The main surface cleaning operation is a closed cycle pressure that collects the returned solvents for recycling in other processes. Whilst a high proportion of the used solvent is collected there is an amount that is classified as fugitive. Other significant solvent use for the process is for individual cleaning of components using decanted bottles and wipes. All the surface cleaning operations are undertaken in a clean room which air is extracted through a stack and is regularly monitored for emission values.

Solvents are delivered to site in 200 litre metal drums and are decanted into the closed cycle cleaning equipment or individual bottles as required. Any waste solvents are stored in drums until disposal and used wipes are stored in sealed bags.

### Conditions

	Pollutant	Source	Emission limit	Type of monitoring	Frequency of monitoring
1.	VOC expressed as total mass of organic carbon	Waste gases	75mgCarbon/ Nm <sup>3(1)</sup>	Manual extractive testing <sup>(2)</sup>	Annual <sup>(3)</sup>

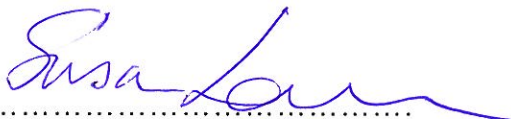
2.	VOC	Fugitive emissions	20% of solvent input	Calculation <sup>(4)</sup>	Within 12 months of issue.
3.	VOC	Consumption		Calculation <sup>(4)</sup>	Annual <sup>(3)</sup>
4.	VOC	Solvent management plan		Calculation <sup>(4)</sup>	Within 12 months of issue.
<p>The emission limits do not apply to individual organic solvent cleaning solutions which contain less than 30% VOC by weight</p> <p>For batch processes which run for 2 hours or less, the extractive sampling shall take place over a complete cycle.</p> <p>For all other activities the sampling period shall be sufficient such that at least 3 results are obtained.</p> <p>Monitoring frequency may be reduced if it meets the requirements in Process Guidance Note 6/45(11) or subsequent versions.</p> <p>(4) See 81560(b) Solvent Management Plan for calculation formula</p>					

5. Surface cleaning materials designated, because of their VOC content, classed as Risk phrase R40, R45, R46, R49, R60, R61 or R68 until 1 June 2015 or Hazard statement H340, H341, H350, H351, H360D or H360F from 1 December 2010 shall not be used without a substantial variation application being accepted.
6. All emissions shall be free from offensive odour outside the site boundary, as perceived by the regulator.
7. Emissions shall be contained and vented and abated if required to meet with conditions
8. The operator shall keep records of inspection, tests and monitoring. The records shall be:
  - (a) Kept on site.
  - (b) Kept by the operator for at least two years.
  - (c) Made available for the regulator to examine.
9. If any records are kept off-site they shall be made available for inspection within one working week of any request by the regulator.
10. The operator shall notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values.
11. The results of non-continuous emission testing shall be forwarded to the regulator within 8 weeks of the completion of the sampling.
12. Adverse results from any monitoring activity 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.
  - (b) Clearly record as much detail as possible regarding the cause and extent of the problem, and the remedial action taken.
  - (c) Re-test to demonstrate compliance as soon as possible.
  - (d) Inform the regulator of the steps taken and the re-test results.

13. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall:
- (a) Investigate and undertake remedial action immediately.
  - (b) Adjust the process or activity to minimise those emissions.
  - (c) Promptly record the events and actions taken.
14. The regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result:
- (a) If there is an emission that is likely to have an effect on the local community.
  - (b) In the event of the failure of key arrestment plant.
15. In cases of non-compliance causing immediate danger to human health, operation of the activity must be suspended. All of the following criteria shall be taken into account.
- (a) The toxicity of the substance being released.
  - (b) The amount released.
  - (c) The location of the installation.
  - (d) The sensitivity of the receptors.
16. For periodic measurements of VOC at least three readings must be obtained during each measurement exercise.
17. VOC emission limit values shall be considered to be complied with if, in one monitoring exercise:
- (a) The average of all the readings does not exceed the emission limit values.
  - (b) None of the hourly averages exceeds the emission limit value by more than a factor of 1.5\*
- \* The hourly average of the 30 minute means value may be used to determine compliance
- Where monitoring does not meet the requirements of (a) or (b), then no result shall exceed the emission concentration limits specified.
18. The introduction of dilution air to achieve emission concentration limits shall not be permitted.
19. All potentially odorous materials shall be stored in suitable closed containers or bulk storage vessels, where appropriate vented to suitable abatement plant.
20. Cleaning operations involving organic solvents shall be periodically reviewed, normally at least once every two years, to identify opportunities for reducing VOC emissions. The regulator shall be provided with a report on the conclusions upon request.
21. Application and dispensing of cleaning solvents shall be:
- (a) From a contained device or automatic system.
  - (b) Dispensed by piston type dispenser or similar contained device, when used on wipes.
22. Prior to disposal used wipes and other items contaminated with organic solvent shall be placed in a suitably labelled metal bin, fitted with a self closing lid.

23. Suitable organic solvent containment and spillage equipment shall be readily available in all organic solvent handling areas.
24. The operator shall develop a list of key arrestment plant and shall have a written procedure for dealing with its failure, in order to minimise any adverse effects.
25. The operator shall have the following available for inspection by regulator:
- (a) A written maintenance programme for all pollution control equipment.
  - (b) A record of maintenance that has been undertaken.
26. Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.
27. 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.
  - (b) Steps that are necessary to minimise emissions during start up and shut down.
  - (c) Actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.
28. 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.
29. The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit.
30. If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment

Signed:



Head of Environmental and Community Health Services

Date:

05 October 2011



## **GENERAL NOTES**

### **1 Variation**

The regulator will ensure that the permit remains up to date in line with the requirements set out in Regulation 20(1). This may involve issuing a Variation Notice following amendment to the Secretary of State's Guidance Notes or following receipt of any direction from the Secretary of State.

### **2 Review of Conditions**

The regulator may at any time undertake a review of the conditions in this permit under Regulation 34(1). Where significant pollution is encountered or where there are changes in BAT or where the operational safety of the activity requires other techniques to be used an immediate review shall be undertaken.

### **3 Appeal**

The permitted operator can appeal in writing to the Secretary of State against the items listed in Regulation 31.

Appeals shall be addressed to:

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

### **4 Transfer of Permit**

The permitted operator who wishes to transfer the whole or part of the permit to a person who proposes to carry out the activity in the holder's place may do so in accordance with Regulation 21. Both the operator and the proposed transferee shall jointly make an application to the regulator to effect the transfer. An application shall include the permit and any fee prescribed in respect of the transfer under Regulation 19 and shall contain the operator's and the proposed transferee's contact details.

### **5 Variation of Conditions of Permits**

Under Regulation 20, the operator may apply to the regulator to vary the conditions contained within the permit. Such application shall be made in accordance with Part 1 of Schedule 5 and shall be accompanied by any fee prescribed in respect of the application under Regulation 19; and paragraphs 8 of Part 1 of Schedule 5 and paragraphs 5(3) and (4) of schedule 5 shall have effect with respect to such applications.

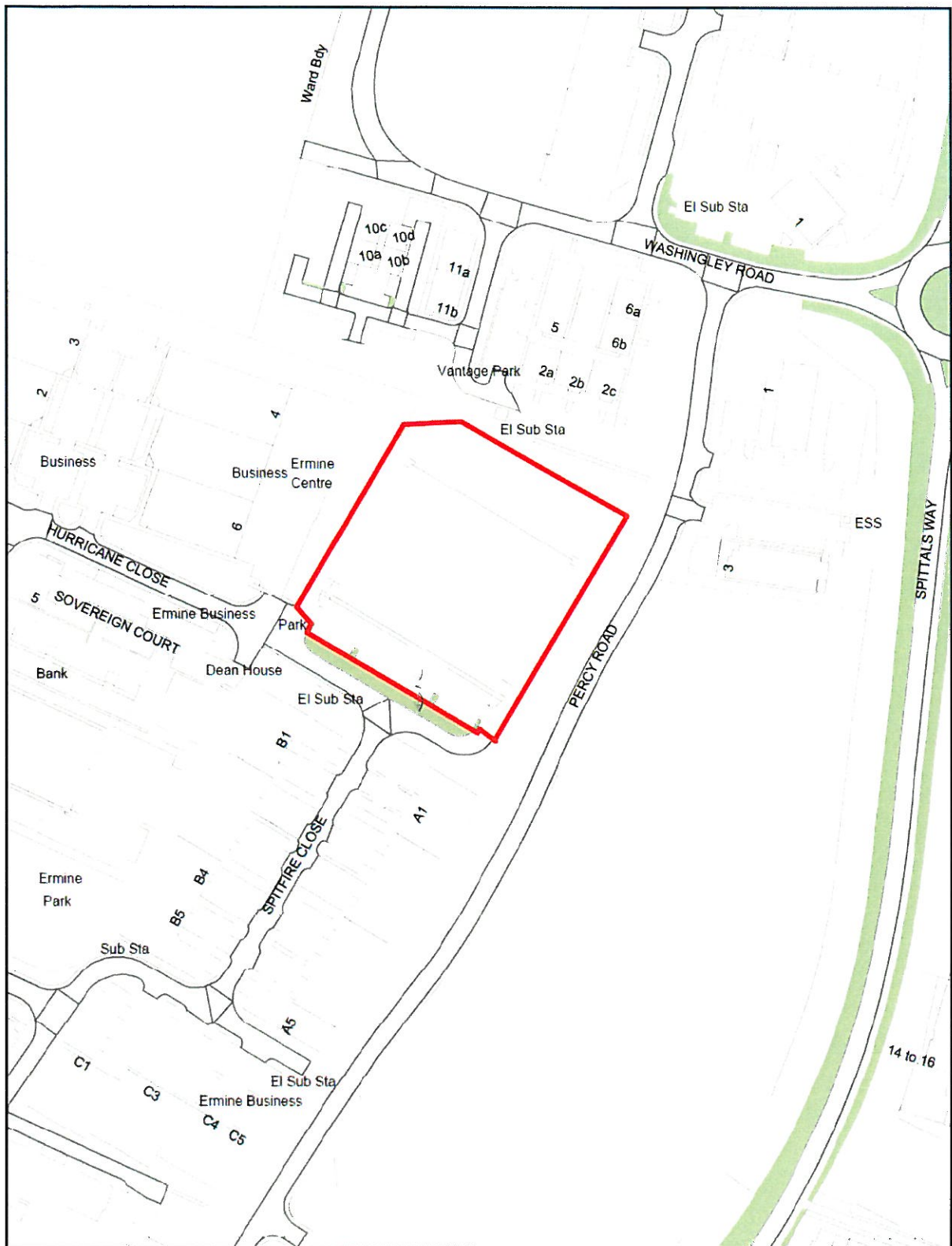
### **6 Other Legal Requirements**

This permit is issued solely for the purpose of the Pollution Prevention and Control Act and its associated Regulations and the operator must ensure that he complies with all other statutory requirements.

### **7 Annual Subsistence Charge**

The Secretary of State has drawn up a charging scheme under Regulation 19. Under this scheme Local Authorities are required to levy an annual subsistence charge related to the permit. The Local Authority will invoice for the amount due which is subject to annual review by the Department of the Environment Food and Rural Affairs.

## B22/11 (a) Location plan



0 0.02 0.04 0.08 Kilometers

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