

Permit Reference: B04/18

# **ENVIRONMENTAL PERMIT**

# Pollution Prevention and Control Act 1999 Environmental Permitting (England and Wales) Regulations 2016 as amended

Operator
IKO PLC
Appley Lane North,
Appley Bridge,
Wigan,
Lancashire
WN6 9AB

Address of Permitted Activity
IKO Insulations UK
Alconbury Weald Enterprise Park
Huntingdon
Cambridgeshire
PE28 4WX

Registered Office As opposite

**Company Registration Number** 08188653

Regulated Activities:

Di-isocvanate process

Regulator contact details

Huntingdonshire District Council
Pathfinder House
St Mary's Street

St Mary's Street Huntingdon PE29 3TN 01480 388 388

Permit Status Log:

Ref	Detail	Date	Comment
B04/18	Permit Issued	26 <sup>th</sup> June 2018	issued

# Environmental Permit



Huntingdonshire District Council (the regulator) hereby permits IKO PLC Appley Lane North Appley Bridge Wigan WN6 9AB to operate a di-isocyanate process as defined in Schedule 1, Part 2 Section 4.1 Part B(a) of the Environmental Permitting Regulations, and as described below, in accordance with the following conditions which shall apply forthwith.

# **Description of Activity**

The site will produce insulation board, typically for the construction and house building market. The board is manufactured by unwinding the foil upper and lower sections of the finished product onto the pouring table, at this point the constituent chemicals are pumped through several pouring heads onto the bottom foil. This mixture of chemicals creates a reaction which causes the substance to expand rapidly and hence form the middle of the insulation foam 'sandwich'. The blowing agent used to create the expansion effect is Pentane.

As the foaming liquid begins to cure, the top layer of the foil sandwich is applied, after which the block passes through a heated section to further cure and set the product at the desired height.

The next section of the manufacturing process is to cut the blocks to size. As part of the cutting process dust is formed at the moving knife sections, this is extracted away at source through DSEAR rated equipment and then passed through a block briquette machine to form solid blocks of waste foam, which is collected in a skip before being removed from site via a registered waste contractor.

The final product is wrapped, palletised and stored ready for delivery to the customer.

There are no combustion activities on site.

Location plan can be seen on B04/18(a) Location plan

#### **Conditions**

## Emission limits and monitoring provisions.

 All activities shall comply with the emission limits and provisions with regard to releases in Table 1 below. The reference conditions for limits in Table 1 are: 273.1K, 101.3kPa, without correction for water vapour content.

Table 1:

Pollutant	Source	Emission limit	Type of monitoring	Monitoring frequency		
Di- isocyanates as total NCO group	Abated emissions	0.1 mg/Nm <sup>3</sup> averaged over any 2-hour period whilst plant is in operation	Quantitative	Annually during normal production using for example MDHS 25/3		
Particulate matter	Abated emissions	50mg/Nm <sup>3</sup>	Indicative	Continuous during normal operation		
Substances used as blowing agents	<ul> <li>Identify and record substances used as blowing agents on site including the ODP, GWP and POCP figures (see paragraph 3.5 of PG note 6/29(12)) for each substance (see also Section 7 of PG note 6/29(12)).</li> <li>Record annual usage of individual substances used as blowing agents to be made available to the Regulator upon request</li> </ul>					

Note: This permit does not set a VOC emission limit, as the operator has confirmed that the VOC emissions include only Pentane, which is used as a blowing agent. (see PG 6/29(12), Table 3, (Page 11) Note 1).

- 2. The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. The records shall be:
  - Kept on site
  - Kept by the operator for at least two years; and
  - Made available for the regulator to examine
- 3. If any records are kept off site they shall be made available for inspection within one working week of any request by the regulator.

#### Information required by the Local Authority

- 4. The operator shall notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values.
- 5. The results of non-continuous emission testing shall be submitted to the regulator within 8 weeks of completion of the sampling.
- 6. Adverse results from any monitoring activity shall be investigated by the operator as soon as the monitoring data has been obtained. The 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.
  - Notify the regulator.
- 7. The operator shall provide a list of key arrestment plant and have a written procedure for dealing with its failure, in order to minimise any adverse effects.

#### Visible and odorous Emissions

- 8. All emissions to air, other than condensed water vapour, shall be free from persistent visible emissions and free from droplets.
- 9. There shall be no offensive odour beyond the site boundary, as perceived by the regulator.
- 10. Visual and olfactory assessments of emissions shall be made frequently and at least once each day whilst the process is in operation. The time, location and result of these assessments shall be recorded.

## **Continuous Monitoring**

- 11. The particulate matter arrestment equipment serving the cutting operations form production lines shall be continuously indicatively monitored to assess the performance of the particulate matter arrestment equipment. An alarm shall be fitted to activate a visual and audible warning at 75% of the emission limit. Emission events that result in the alarms being activated shall be logged, investigated immediately and details of the corrective action recorded.
- 12. All continuous monitoring readings shall be on display to appropriately trained operating staff.
- 13. All continuous monitors shall be operated, maintained and callbrated (or referenced, in the case of indicative monitors) in accordance with the manufacturers' instructions, which shall be made available for inspection by the regulator. The relevant maintenance and calibration (or referencing, in the case of indicative monitors) shall be recorded.
- 14. Any continuous emissions monitor (CEM) used shall provide reliable data >95% of the operating time (i.e. availability >95%). A manual or automatic procedure shall be in place to detect instrument malfunction and to monitor instrument availability.

#### **Quantitative Monitoring**

- 15. Di-isocyanate monitoring shall be carried out by extractive testing annually and shall meet the limits set in table 1.
- 16. For batch processes, where the production operation is complete within 2 hours, then the extractive sampling shall take place over a complete cycle of the activity and for all activities the sampling period shall be sufficient such that at least three results are obtained.
- 17. Should the batch cycle not be compatible with the time available for sampling, then the data shall be obtained over a minimum period of 2 hours in total.

18. The introduction of dilution air to achieve emission concentration limits shall not be permitted.

#### **Abnormal Events**

- 19. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall:
  - investigate and undertake remedial action immediately
  - adjust the process or activity to minimise those emissions; and
  - promptly record the events and actions taken
- 20. The local authority shall be informed without delay:
  - if there is an emission that is likely to have an effect on the local community; or
  - in the event of the failure of key arrestment plant, for example, bag filtration plant or scrubber units.

# Materials, handling and storage

- 21. Pentane shall be stored within 2 secured underground storage tanks, with monitors in the area to detect any leakage.
- 22. Other chemicals stored above ground in bulk storage tanks shall be sited within an impervious bunded area that is capable of containing not less than 110% of the largest container's storage capacity or 25% of their aggregate storage capacity, whichever is the greater.
- 23. All fixed bulk storage tanks shall be fitted with a suitable audible and visual high level alarm or volume indicator to warn of overfilling.
- 24. Contaminated air displaced from the headspace of tanks during filling shall be back vented to the delivery tanker.
- 25. Strict procedures shall be in place to control deliveries, this will include the interlocking of the valves to the pumping system to prevent pump off without the correct processes in place. This shall be computer controlled and integrated into the delivery management system. A copy of the written procedure shall be agreed with the local authority within three months of the date of this Permit.
- 26. Particulate matter shall be extracted to atmosphere via bag filters. Excess dust shall be processed through a block briquette machine to form solid blocks of waste foam and removed from site by a waste contractor.
- 27. Waste shall be contained within external skips and handled in a manner that minimises fugitive emissions.

#### **Dust and spillage control**

- 28. Sufficient supplies of sultable decontaminant and a suitable absorbent material shall be available for use in the event of a spillage. Such spillages shall be immediately cleaned up and the containment absorbent material shall be held in an enclosed container after all the di-isocyanate has reacted (preventing pressurisation of the container).
- 29. All spillages shall be cleared as soon as possible; solids by vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping of dusty spillages is not permitted.
- 30. A high standard of housekeeping shall be maintained.

#### Stacks, vents and process exhausts

- 31. Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.
- 32. Chimneys and vents shall not be fitted with any restriction at the final opening, such as a plate, cap or cowl, with the exception of a cone which may be necessary to increase the efflux velocity of emissions.
- 33. Vents, stacks and ductwork shall be leak proof.

#### **General Operations:**

- 34. Effective and preventative maintenance shall be employed on all plant and equipment, including enclosures, dust abatement equipment and alarm systems. Records shall be kept of all preventative maintenance and shall be made available for inspection on request.
- 35. Staff at all levels shall receive proper training and instruction in their duties, in so far as it relates to the control of the process and the release of emissions to air. Particular emphasis shall be given to procedures relating to the starting up and shutting down of the process and the necessary steps to be taken to control abnormal conditions. Records shall be kept of all relevant training received and shall be made available for inspection on request.
- 36. Essential spares and consumables shall be held on site or be available at short notice in order to enable any plant breakdown that may affect emissions to be rectified rapidly.

# **Best Available Techniques**

37. 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.

# **Operation Changes**

38. If the operator proposes to make a change in operation of the Installation, they 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: Date: ES T-re 2015

**Head of Community** 

#### **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.

# B04/18(a) Location plan

