

Permit with introductory note

NORTH EAST LINCOLNSHIRE COUNCIL

POLLUTION PREVENTION AND CONTROL ACT 1999 Environmental Permitting Regulations 2016 (as amended)

Installation address

Reichhold UK Ltd Laporte Road Stallingborough Nr Grimsby North East Lincolnshire DN41 8DR

Permit Ref. no: EP/20160003/V2

Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016 (S.I.2016 No.1154) ("the EP Regulations") to operate an installation carrying out one or more of the activities listed in Part 2 to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions shall be subject to best available techniques, 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 condition within the permit.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Confidentiality

The Permit requires the Operator to provide information to North East Lincolnshire Council. The Council will place the information onto the public registers in accordance with the requirements of the EP Regulations. If the operator considers that any information provided is commercially confidential, it may apply to North East Lincolnshire Council to have such information withheld from the register as provided in the EP Regulations. To enable North East Lincolnshire Council to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the permit

Your Attention is drawn to the Variation Notification Procedure condition in the permit. This Permit may be varied in the future. If at any time the activity or any aspect of the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator should be contacted.

Surrender of the permit

Where an Operator intends to cease the operation of an installation (in whole or in part) the regulator should be informed in writing, such notification must be made as specified in regulation 24(3) of the EP regulations.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will be allowed unless the Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

Responsibility under workplace health and safety legislation

This Permit is given in relation to the requirements of the EP regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

Appeal against permit conditions

Right to Appeal

You have the right of appeal against this permit within 6 months of the date of the decision. The Council can tell you how to appeal. You will normally be expected to pay your own expenses during an appeal.

You will be liable for prosecution if you fail to comply with the conditions of this permit. If found guilty, the maximum penalty for each offence if prosecuted in a Magistrates Court is £50,000 and/or 6 months imprisonment. In a Crown Court it is an unlimited fine and/or 5 years imprisonment.

Our enforcement of your permit will be in accordance with the Regulators "Compliance Code."

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 31 and Schedule 6 of the EP Regulations.

Appeals should be received by the Secretary of State for Environment, Food and Rural Affairs. The address is as follows:

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

Tel: 0117 372 8726 Fax: 0117 372 8139

Please Note

An appeal brought under Regulation 31 (1) (b) and Schedule 6, in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions.

End of introductory note

Permit issued under the Environmental Permitting Regulations (England and Wales) 2016 (as amended)

Permit

Permit Ref. No: EP/20160003/V2

North East Lincolnshire Council (the Regulator) in exercise of its powers under Regulation 13(1) of the Environmental Permitting Regulations 2016 (S.I.2016 No.1154) hereby permits.

Reichhold UK Ltd ("the operator"),

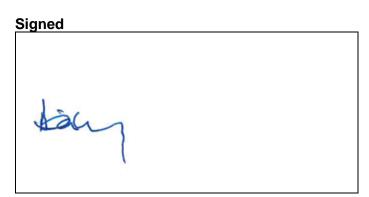
Whose registered office is: Reichhold UK Ltd 54 Willow Lane Mitcham Surrey CR4 4NA

Company Registration. no: 2051980

To operate an installation at:

Reichhold UK Ltd Laporte Road Stallingborough Nr Grimsby North East Lincolnshire DN41 8DR

to the extent authorised by and subject to the conditions of this Permit and within the boundary identified in Appendix 1, installation boundary.



Adrian Moody Licensing & Environmental Protection Manager

Authorised to sign on behalf of North East Lincolnshire Council

Dated

16.11.23

Activity description

The Activities carried out at the Stationary Technical Unit are as detailed in Schedule 1, Part 2, Chapter 6.5, Part B of the Environmental Permitting (England and Wales) Regulations 2016 (as amended), which states:

"manufacturing or formulating printing ink or any other coating material containing, or involving the use of, an organic solvent, where the carrying on of the activity is likely to involve the use of 100 or more tonnes of organic solvents in any 12-month period"

The following Directly Associated Activities are carried out on the Site: Solvent Emission Activity consuming 100 tonnes or more of solvent in any 12-month period as detailed in Part 2, Schedule 14 of the Environmental Permitting (England and Wales) Regulations 2016 (as amended). EU industrial emissions Directive Solvent emission activity 100 tonnes or more in any 12-month period.

Reichhold UK Ltd operates the manufacture of structural resins at the installation on a batch process basis. Two generic types of resin are manufactured on site - modified Unsaturated Polyester Resin (UPR) and Gelcoats. These are manufactured in two production buildings, the Polyester Mixing Building (PMB) and the Gelcoats building.

The installation boundary mentioned in permit conditions are shown in the plan attached to this permit. The boundary of the site is delineated in red on the Site Plan ("the Installation Boundary"), as detailed in Appendix 1.

The general location of the Permitted Installation is as shown on the Location Plan, as detailed in Appendix 2.

Conditions

Emission limits, monitoring and other provisions

Non VOC limits

1. All activities shall comply with the emission limits and provisions with regard to non-VOC releases in **Table 1** below.

Table 1. Emission limits, monitoring and other provisions for non VOC releases

Substance	Source	Emission	Type of	Monitoring
		limits/provisions	monitoring	frequency
Particulate matter	All coating materials manufacturing processes (except for ink manufacture)	50 mg/Nm3 as 8- hour mean where non-continuous monitoring is undertaken for contained sources	Manual extractive testing	Annual
	All processes	No visible		
		emission		

2. The reference conditions for limits in Table 1 are: 273.1K, 101.3kPa, without correction for water vapour content, unless stated otherwise.

Total Emission Limit Value

3. The Total Emission Limit Value set out in **Table 2** below shall be met.

Table 2. Total Emission Limit Values (whole site)

VOC in waste gases	Total emission limit values /	Monitoring	
_	requirements	Manual extractive testing	
Site organic solvent		Fugitive emission limits	
consumption: 1000 tonnes or	3% of organic solvent input	determined in accordance with	
more		Schedule A to this permit.	

- 4. The total emission limit from the activity expressed as a percentage of the organic solvent input into the activity shall be equal to or less than the total emission limit value.
- 5. The Operator shall produce a Solvent Management Plan that shall be updated annually and submitted to the Regulator. The Solvent Management Plan shall be produced using the definitions and calculations set out in Schedule A (reproduced from PG Note 6/44(11)) of this Permit.
- 6. The following designated materials shall not be used;
 - Materials designated because of their VOC content hazard statement: H340, H350, H350i, H360D, or H360F and risk phrases R45, R46, R49, R60, or R61
 - Material designated because of their halogenated VOC content: hazard statements H341, H351 and risk phrases R40, or R68

Monitoring, investigating and reporting

- 7. The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. Records shall be:
 - kept on site;
 - kept by the operator for at least two years; and
 - made available for the regulator to examine.
- 8. 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 regulator

9. The operator shall notify the regulator at least 7 days before any periodic 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. The results of non-continuous emission testing shall be forwarded to the regulator within 8 weeks of completion of the sampling.

- 10. Adverse results from any monitoring activity (both continuous and non-continuous) 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;
 - clearly record as much detail as possible regarding the cause and extent of the problem, and the remedial action taken;
 - re-test to demonstrate compliance as soon as possible; and inform the regulator of the steps taken and the re-test results.

Visible and odorous emissions

- 11. Emissions from combustion processes in normal operation shall be free from visible smoke. During start up and shut down the emissions shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742.
- 12. All other releases to air, other than condensed water vapour, shall be free from persistent visible emissions.
- 13. All emissions to air shall be free from droplets.
- 14. There shall be no offensive odour beyond the site boundary, as perceived by the Regulator.

Silos

- 15. All new or replacement silo filtration plant shall be designed to operate to an emission standard of less than 10 mg/m3 for particulate matter.
- 16. Operators shall have a procedure in place to ensure that visual assessment of emissions from silo inlet connections and the silo arrestment plant are undertaken throughout the duration of all bulk deliveries.
- 17. The outlet shall be checked for signs that emissions have occurred. The equipment shall also be checked for defects in the air flow or the cam shakers. If emissions or defects are detected then corrective action shall be taken promptly and before another delivery takes place. Any failure of the silo management system (e.g. high

- level alarms, filter pressure relief valve) shall lead to full investigation of the operation of the plant and equipment.
- 18. All arrestment plant for silos serving process operations shall be inspected in accordance with a written procedure as agreed with the Regulator.

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 regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result:
 - 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.
- 21. The operator shall provide a list of key arrestment plant and shall have a written procedure for dealing with its failure, in order to minimise any adverse effects.
- 22. In cases of non-compliance causing immediate danger to human health, or threatening to cause an immediate significant adverse affect upon the environment, operation of the activity must be suspended. All of following criteria should be taken into account:
 - the amount released;
 - the location of the installation;
 - the sensitivity of the receptors; and
 - the toxicity of the substances being released

Control techniques

VOC and odour control storage

23. Bulk storage tanks for organic solvents and organic solvent-containing liquids shall wherever practicable be back vented to the delivery tank during filling. Where this is

- impracticable, displaced air vents shall be sited in such a way as to prevent the arising of offensive odour beyond the site boundary.
- 24. All potentially odorous waste materials shall be stored in suitable closed containers or bulk storage vessels, where appropriate vented to suitable abatement plant.
- 25. The exterior of outdoor bulk storage tanks for organic solvent storage shall be light coloured.
- 26. All new static bulk organic solvent storage tanks containing organic solvent with a composite vapour pressure that is likely to exceed 0.4kPa at 20oC (293K) shall be fitted with pressure vacuum relief valves. Pressure vacuum relief valves should be examined at regular intervals for signs of contamination, incorrect seating and be cleaned and/or corrected as required. The normal minimum examination frequency shall be once every six months, but less frequent examination may be justified having regard for the tank contents and the potential emissions as a result of valve failure.
- 27. All fixed storage tanks shall be fitted with high-level alarms or volume indicators to warn of overfilling. Where practicable the filling systems shall be interlocked to the alarm system to prevent overfilling.

28. Bunding shall:

- completely surround the bulk liquid storage tanks;
- be impervious and resistant to the liquids in storage; and
- be capable of holding 110% of the capacity of the largest storage tank.
- 29. Provision shall be made for an impervious collection area for contaminated water due to spillage or fire-fighting water. A tertiary site perimeter bund shall be maintained and Integrity checks for the tertiary bund shall be included in the sites planned preventative maintenance programme.

VOC control handling

- 30. Raw materials containing VOC shall be stored in closed storage containers.
- 31. Emissions from the emptying of mixing vessels and transfer of materials shall be adequately contained, preferably by the use of closed transfer systems. This may be achieved by the use of closed mobile containers, containers with close-fitting lids, or, preferably, closed containers with pipeline delivery.

32. Wherever practical in relation to occupational safety and explosion hazards, continuous extraction of air from vessels should be avoided for example, by the use of an interlock to ensure that extraction can only commence when the vessel inspection hatch or manhole is opened.

VOC control cleaning

- 33. Where cleaning operations involve the use of organic solvents the dispensing of cleaning solvent shall be:
 - In the case of fixed manufacturing equipment from a contained device or automatic system when applied directly;
 - dispensed by piston type dispenser or similar contained device, when used on wipes.
- 34. When organic solvent is used on wipes:
 - pre-impregnated wipes shall be held within an enclosed container prior to use;
 - where practicable no organic solvent cleaning fluids or significantly less volatile organic solvents cleaning fluids should be used (with or without the addition of mechanical, chemical or thermal enhancements).
- 35. Where practicable, fixed equipment shall be cleaned in-situ and such equipment should, where practicable, be kept enclosed whilst cleaning is carried out.
- 36. Cleaning operations involving organic solvents shall be periodically reviewed, normally at least once every two years, to identify opportunities for reducing VOC emissions (e.g. cleaning steps that can be eliminated or alternative cleaning methods). The regulator shall be provided with a report on the conclusions of the review.

VOC control waste

- 37. All reasonably practicable efforts shall be made to minimise the amount of residual organic solvent bearing material left in drums and other containers after use. All organic solvent contaminated waste should be stored in closed containers.
- 38. Prior to disposal, empty drums and containers contaminated with organic solvent shall be closed to minimise emissions from residues during storage prior to disposal

and labelled, so that all personnel who handle them are aware of their contents and hazardous properties.

General control techniques

Dust and spillage control

- 39. Dusty wastes shall be stored in closed containers and handled in a manner that avoids emissions. Dry sweeping of dusty materials shall not normally be permitted unless there are environmental or health and safety risks in using alternative techniques.
- 40. Suitable organic solvent containment and spillage equipment shall be readily available in all organic solvent handling areas.
- 41. A high standard of housekeeping shall be maintained.

Training

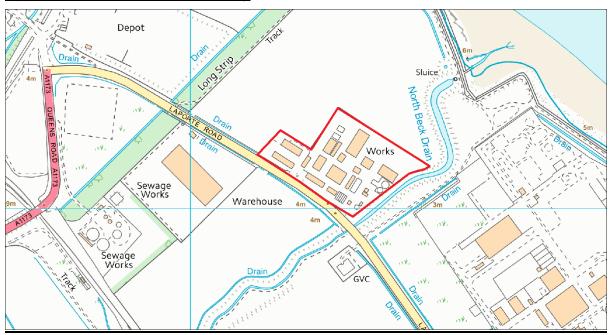
- 42. All staff whose functions could impact on air emissions from the activity shall receive appropriate training on those functions. This shall include:
 - awareness of their responsibilities under the permit;
 - steps that are necessary to minimise emissions during start-up and shutdown;
 - actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.
- 43. 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.

<u>Maintenance</u>

- 44. The operator shall have the following available for inspection by the regulator:
 - a written maintenance programme for all pollution control equipment; and
 - a record of maintenance that has been undertaken.

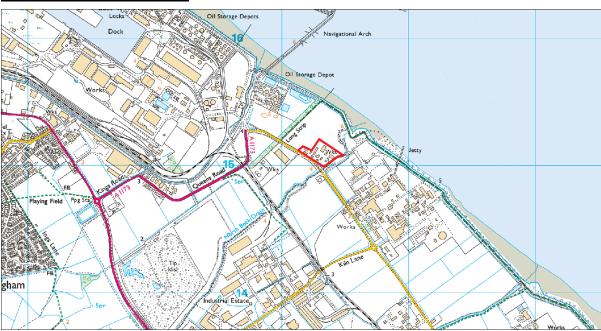
End of Permit

Appendix 1 – Installation Boundary



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Appendix 2 - Site Location



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Schedule A

Compliance with total emission limit values

Compliance is achieved if the total emission from the activity expressed as a percentage of the organic solvent input to the activity is equal to or less than the total emission limit value:

 Where total emission is equal to the mass of organic solvent released in the waste gases plus the fugitive releases.

Total emission = O1 + Fugitive

And organic solvent input is equal to the quantity of organic solvents purchased and used in the process plus the quantity of organic solvents recovered and reused as organic solvent input into the process as determined as part of the solvent management plan.

Organic solvent input $(I) = I_1 + I_2$

Compliance with the total emission limit value is achieved if:

$$\frac{\textit{Total emission}}{\textit{Organic solvent input}} \times 100 \textit{ is equal or less than Total emision limit value}$$

The 'VOC workbook' follows the compliance requirements above and provides suitable methods for determining both the contained and fugitive releases from an installation and may be used as a tool for demonstrating compliance with the Total emission limit value.

Determination of solvent consumption (from PG 6/44 (11))

Construction of inventories of materials consumed and disposed of may involve the identification of individual organic solvents, or solids. This may give rise to an issue of commercial confidentiality. Information supplied must be placed on the public register, unless exclusion has been granted on the grounds of commercial confidentiality or national security. Further information can be found in the appropriate chapter of the relevant General Guidance Manual.

A determination of the organic solvent consumption, the total mass of organic solvent Inputs minus any solvents sent for reuse/recovery off-site, should be made and submitted to the regulator annually, preferably to coincide with the operators stocktaking requirements. This should be in the form of a mass balance in order to determine the annual actual consumption of organic solvent (C): Where: $C = I_1$ - O_8 (See Definitions section below).

Solvent management plan

The Solvent Management Plan provides definitions and calculations to demonstrate compliance with the VOC monitoring requirements.

The Industrial Emissions Directive provides guidance on what constitutes a solvent input and an output. This can be described more simply as needing data on:

Inputs:

How much solvent is:

- bought, whether in pure form or contained in products;
- recycled back into the process.

Outputs:

How much solvent is:

- emitted to air, whether directly or via abatement equipment;
- discharged to water, whether directly or via water treatment;
- sent away in waste;
- lost by spills, leaks etc;
- leaving the installation in the product.

The 'VOC Workbook' provides suitable methods for determining contained and fugitive releases.

British Coating Federation (http://www.coatings.org.uk/Coatings_Care/The_VOC_Workbook.aspx)

Definitions

The following definitions provide a framework for the mass balance calculations used in determining compliance.

Inputs of organic solvent in the time frame over which the mass balance is being calculated (I)

I₁ The quantity of organic solvents or their quantity in mixtures purchased which are used as input into the process/activity (including organic solvents used in the cleaning of equipment, but not those used for the cleaning of the products).

I₂ The quantity of organic solvents or their quantity in mixtures recovered and reused as solvent input into the process/activity. (The recycled solvent is counted every time it is used to carry out the activity.)

Outputs of organic solvents in the time frame over which the mass balance is being calculated (O)

- O₁ Emissions in waste gases.
- O2 Organic solvents lost in water, if appropriate taking into account waste water treatment when calculating O5.
- O₃ The quantity of organic solvents which remains as contamination or residue in products output from the process/activity. The fugitive emission limit value does not include solvent sold as part of a coatings mixture in a sealed container.
- **O**₄ Uncaptured emissions of organic solvents to air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.
- O_5 Organic solvents and/or organic compounds lost due to chemical or physical reactions (including for example those which are destroyed, e.g. by thermal oxidation or other waste gas or waste water treatments, or captured, e.g. by adsorption, as long as they are not counted under O_6 , O_7 or O_8).
- O₆ Organic solvents contained in collected waste.

- **O**₇ Organic solvents, or organic solvents contained in mixtures, which are sold or are intended to be sold as a commercially valuable product.
- $\mathbf{O_8}$ Organic solvents contained in mixtures recovered for reuse but not as input into the process/activity, as long as not counted under O_7 .
- $\mathbf{O_9}$ Organic solvents released in other ways.