

Permit with introductory note

**Environmental Permitting (England and Wales)
Regulations 2010 (as amended)**

Installation address

**Phillips 66 Ltd
Immingham Pipeline Centre
Immingham Docks
Immingham
North East Lincolnshire
DN40 2PB**

Permit Ref. no: EP200200097V3

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 2010 (S.I.2010 No. 675) (“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.

Brief description and installation regulated by this permit

Process: Petrol Vapour Recovery as prescribed by Section 1.2 of Schedule I of the Environmental Permitting (England and Wales) Regulations 2010.

Phillips 66 Immingham Pipeline Terminal was established in 1960, and operates 24 hours per day, 365 days per year. The terminal has a throughput greater than 1,500,000 tonnes per year.

Petrol is received at the terminal from two sources:-

- a) Phillips 66, Humber Refinery.
- b) Total Refinery, Immingham.

The second source is only used on occasions when this refinery is shut down. Petrol from both sources is transferred to the terminal via dedicated pipelines.

The Vapour Recovery Unit (VRU) has been in use since 1994. It recovers vapour from ship loading operations as well as vapour recovered from road tankers connected to the bottom loading system. The terminal has top loading gantries which are only used for the loading of heavier distillate fuels – not petroleum spirit.

| Superseded Licences/Consents/Authorisations relating to this installation | | |
|--|---|----------------------|
| Holder | Reference Number | Date of Issue |
| ConocoPhillips Ltd. | EPA/PT-02-II/V1 | 13/10/1998 |
| ConocoPhillips Ltd. | EP/200200097 (Regulator) 020054 / 020057 (Operator) | 19 January 2005 |

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

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) 2010 (as amended)

Permit

Permit Number: EP/200200097V3

North East Lincolnshire Council (the Regulator) in exercise of its powers under Regulation 13(1) of the Environmental Permitting Regulations 2010 (S.I. 2010 No. 675) hereby permits.

Phillips 66 Ltd. ("the operator"),

Whose registered office is:-


Phillips 66 Ltd
7th Floor
200-202 Aldersgate Street
London
EC1A 4HD

To operate an installation at:-

Phillips 66 Ltd.
Immingham Pipeline Centre
Immingham Docks
Immingham
North East Lincolnshire
DN40 2PB

to the extent authorised by and subject to the conditions of this Permit and within the boundary identified in condition C

Signed



Nathan Vear
Head of Service - Environment
Authorised to sign on behalf of
North East Lincolnshire Council

Dated



CONDITIONS

Extent and limit of the installation

A Variation Notification Procedure

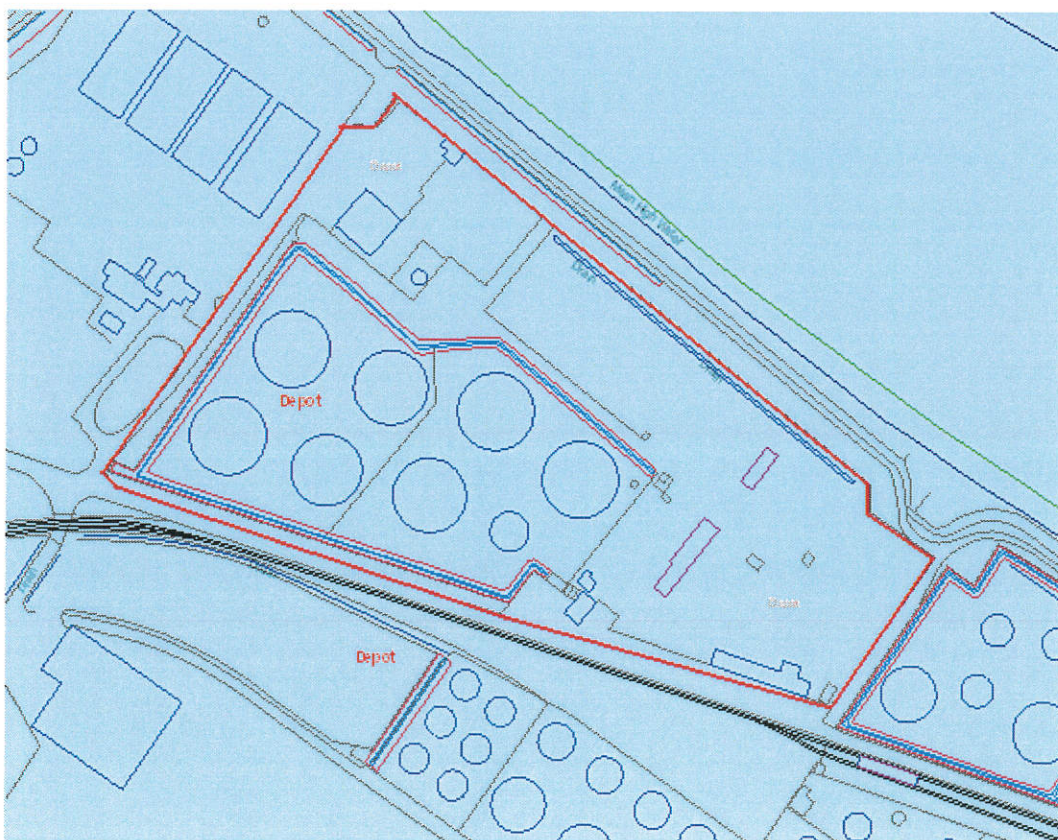
If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'change of operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

B Best Available Technique

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 installation which is not regulated by any other condition in this permit.

C The Permitted Installation

The operator is authorised to carry out the activities and/or associated as specified and within the boundary shown in red on the plan below:-



Process: Petrol Vapour Recovery as prescribed by Section 1.2 of Schedule I of the Environmental Permitting (England and Wales) Regulations 2010.

Phillips 66 Ltd Immingham Pipeline Terminal was established in 1960, and operates 24 hours per day, 365 days per year. The terminal has a throughput greater than 1,500,000 tonnes per year.

Petrol is received at the terminal from two sources:-

- c) Phillips 66, Humber Refinery.
- d) Total Refinery, Immingham.

The second source is only used on occasions when this refinery is shut down. Petrol from both sources is transferred to the terminal via dedicated pipelines.

The Vapour Recovery Unit (VRU) has been in use since 1994. It recovers vapour from ship loading operations as well as vapour recovered from road tankers connected to the bottom loading system. The terminal has top loading gantries which are only used for the loading of heavier distillate fuels – not petroleum spirit.

1.0 General Storage

- 1.1 The external wall and roof of tanks used for the storage of petrol must be painted in a colour or colours with a total radiant heat or light reflectance of 70% or more unless the tank is linked to a vapour recovery unit.
- 1.2 Existing fixed roof tanks T8013 and T8014 and T8034 shall have an internal floating roof, fitted with primary seals as a minimum, designed to achieve an overall containment of vapours of 95% or more. An internal floating roof and seal system installed in a new tank should be deemed to achieve an overall containment of vapours of 95% or more compared to a comparable fixed roof tank solely fitted with pressure/vacuum (P/V) relief valves (see Ref. (h) and (l)) if:
 - the roof is fitted with both primary and secondary seals
 - the primary seal extends from the floating roof to the tank wall and the secondary seal is fitted above it
 - the seal system is designed to accommodate variations of the gap between the floating roof and the tank wall, and the tank and the roof complies with the requirements of BS 2654 or equivalent; and
 - the roof and seal system are designed and installed as per the Institute of Petroleum "Internal Floating Roofs for Oil Storage Tanks Code of Practice", August 1991
- 1.3 Drawing reference 48376/M given as appendix 2 to this document shows the location of those storage tanks currently available for petrol storage. If the terminal wishes to use additional tanks for the storage of petrol, it must do so only when floating roofs or decks are fitted as

prescribed for new storage installations in guidance note PG1/13(04) or when connections are made direct to the VRU.

2.0 Loading and Unloading of Mobile Containers at Terminals

2.1 Displacement vapours from mobile containers being loaded must be returned through a vapour tight connection line to a vapour recovery unit for recovery.

This clause does not apply to top loading of mobile containers while that loading system is permitted.

2.2 The mean concentration of vapours in the exhaust from the vapour recovery unit - corrected for dilution during treatment - must not exceed $35\text{g}/\text{nm}^3$ for any 1 hour.

2.3 All pollutant concentrations shall be expressed at reference conditions 273K, 101.3 kPa, without correction for water vapour content.

2.4 Emissions from the vapour recovery unit shall be continuously monitored using the infra-red gas analyser. The gas analyser shall be calibrated at least once every twelve months by a competent person. A calibration certificate shall be held on file for a minimum of two years.

2.5 The Regulator shall be advised of the provisional time and date at least seven days in advance of any planned maintenance of the vapour recovery unit that necessitates the unit being shut down for more than 24 hours.

2.6 A visual inspection of all pipework, flexible hoses, joints and connections shall be carried out annually to confirm integrity and security and entered into the site log.

2.7 If a vapour leak is detected during service, wherever practicable the system must be shut down until the leak is sealed. In the event that shutdown is not practicable any malfunction or breakdown must be dealt with as a priority three work request. Equipment to facilitate shutdown operations shall be installed at the loading gantry. Operating instructions to loading personnel shall include provisions regarding the detection of leaks and reporting and shutdown procedures.

2.8 Personnel using the top loading systems must be aware of and adhere to written procedures instructing them to keep the outlet of the loading arm as close to the bottom of the mobile container as is reasonably practicable during loading.

3.0 Gantries

- 3.1 The liquid coupler on the loading-gantry vapour-collection hose shall be a cam-and-groove female coupler which shall mate with a 4 inch (101,6MH) cam-and-groove adapter located on the vehicle.
- 3.2 The normal liquid loading rate shall be 2,300 litres per minute (maximum 2,500 litres per minute) per loading arm.
- 3.3 When the terminal is operating at peak demand, its loading gantry vapour collection system, including the VRU, shall be allowed to generate a maximum counter pressure of 55 millibar on the vehicle side of the vapour collection adapter, and a maximum of 45 millibar at the interface between the adapter and the coupler.
- 3.4 Loading gantries must be equipped with an overflow detection control unit which, when connected to the vehicle, shall provide a fail-safe signal to enable loading, providing no compartment overflow sensors detect a high level.
- 3.5 The vehicle shall be connected to the control unit on a gantry via a 10 pin industry standard electrical connector. The male connector shall be mounted on the vehicle and the female connector shall be attached to a flying lead connected to the gantry-mounted Control Unit.
- 3.6 The gantry control unit shall be suitable for 2 wire vehicle systems.
- 3.7 The vehicle shall be bonded to the gantry via the common return wire of the overflow sensors, which shall be connected to pin 10 on the male connector via the vehicle chassis. Pin 10 on the female connector shall be connected to the control unit enclosure which shall be connected to the gantry earth.
- 3.8 The design of the liquid loading and vapour collection facilities on the loading gantry shall be based on the following vehicle collection envelope;

The height of the centre line of the liquid adapter shall be:

- (a) maximum 1.4 metres (unladen); minimum 0.5 metres (laden), the preferred height being 0.7 to 1.0 metres;
- (b) the horizontal spacing of the adapters shall not be less than 0.25 metres (preferred minimum spacing is 0.3 metres);
- (c) all liquid adapters shall be located within an envelope not exceeding 2.5 metres in length;

(d) the vapour-collection adapter shall be located preferably to the right of the liquid adapters and a height not exceeding 1.5 metres (unladen) and not less than 0.5 metres (laden).

3.9 The earth/overflow connector must be located to the right of the liquid and vapour collection adapters and at a height not exceeding 1.5 metres (unladen) and not less than 0.5 metres (laden).

3.10 Loading shall not be permitted unless a permissive signal is provided by the combined earth/overflow control unit.

In the event of an overflow condition or the loss of vehicle earth the control unit on the gantry shall close the gantry loading control valve.

3.11 Loading shall not be permitted unless the vapour collection hose has been connected to the vehicle and there is a free passage for the displaced vapours to a flow from the vehicle into the vapour collection systems.

4.0 General Operations

4.1 Details of all monitoring, maintenance, malfunctions and corrective action taken must be recorded in a site log. The log must be kept on site for a minimum of one year and made available to the Regulator upon request.

4.2.1 Any malfunction or breakdown leading to abnormal emissions must be dealt with immediately and the Regulator informed without delay. Such contact shall be made either by:-

Telephone: Danny Fox on 01472 324787

or fax: North East Lincolnshire as the Regulator on 01472 324785 for the attention of Danny Fox and marked "urgent".

or e-mail: danny.fox@nelincs.gov.uk

5.0 Management

5.1 Management techniques

- proper management, supervision and training for process operations;
- proper use of equipment;
- effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air; and
- it is of good practice to ensure that spares and consumables are available at short notice in order to rectify breakdowns rapidly. This is important with respect to arrestment plant and other necessary

environmental controls. It is useful to have an audited list of essential items.

- Spares and consumables - in particular, those subject to continual wear - should be held on site, or should be available at short notice from guaranteed local suppliers, so that plant breakdowns can be rectified rapidly.

5.2 Staff at all levels need the necessary training and instruction in their duties relating to control of the process and emissions to air. In order to minimise risk of emissions, particular emphasis should be given to control procedures during start-up, shut down and abnormal conditions.

Training may often sensibly be addressed in the EMS referred to above.

- Training of all staff with responsibility for operating the process should include:
 - awareness of their responsibilities under the permit;
 - action to minimise emissions during abnormal conditions
- The operator should maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents should be made available to the regulator on request.

5.3 Effective preventative maintenance should be employed on all aspects of the process including all plant, buildings and the equipment concerned with the control of emissions to air. In particular:

- The regulator should be notified 7 days in advance of any planned maintenance of the vapour recovery unit.
- A record of such maintenance shall be made available for inspection upon request by the Regulator

End of Permit