



**Permit with introductory note**

**NORTH EAST LINCOLNSHIRE COUNCIL**

**POLLUTION PREVENTION AND CONTROL ACT 1999  
Environmental Permitting Regulations 2010 (as amended)**

**Installation address**

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

**Permit Ref. no: EP200200097V4**

## **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.

## **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) 2010 (as amended)**

**Permit**

**Permit Ref. No:** EP/200200097/V4

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**  
**7<sup>th</sup> Floor**  
**200-202 Aldersgate Street**  
**London**  
**EC1A 4HD**

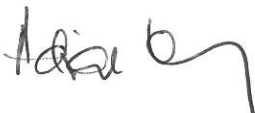
Company Registration. no: 529086

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 Appendix 1, installation boundary.


Signed



Adrian Moody - Licensing Manager

Authorised to sign on behalf of  
North East Lincolnshire Council

Dated



## Activity description

Process for the storage, loading and unloading of petrol at petrol storage terminals as prescribed by Section 1.2 of Schedule I to the Environmental Permitting (England and Wales) Regulations 2010 (as amended).

Phillips 66 Ltd Immingham Petroleum Terminal operates 24 hours a 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) 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.

The installation boundary and key items of equipment mentioned in permit conditions are shown in the plan attached to this permit.

## Conditions

### Emission limits, monitoring and reporting

1. Emissions of the substances listed Table 1 shall be controlled. All activities shall comply with the emission limits and provisions with regard to releases in **Table 1**. The reference conditions for limits in **table 1** are: 273.1K, 101.3kPa, without correction for water vapour content, unless stated otherwise.

**Table 1**

<b>Table 1 - Emission limits, monitoring and other provisions</b>					
<b>Row</b>	<b>Substance</b>	<b>Source</b>	<b>Emission limits/provisions</b>	<b>Type of monitoring</b>	<b>Monitoring frequency</b>
1	Vapour recovery units	Total organic carbon	35g/Nm <sup>3</sup> as 1 hourly average (equivalent to 70% L.E.L for the gas analyser)	As agreed in writing with the Regulator. (Gas analyser)	Continuous

2. The Vapour Recovery System shall be operated and monitored in accordance with Phillips 66 Ltd Procedure on the Operation and Routine Monitoring of the Vapour Recovery Unit (Document References HR-IPC-50008 & HR-IPC-50045). Notification shall be provided in writing to the Regulator of any changes or renewal of this procedure.
3. 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.

4. 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

5. 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.
6. The results of non-continuous emission testing shall be forwarded to the regulator within 8 weeks of completion of the sampling.
7. 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.

#### Abnormal Events

8. 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.
9. In the case of repeated failure of the vapour recovery unit, the operator shall submit, and implement to a timetable, proposals to improve the operating efficiency of the unit.
10. The regulator should 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 vapour recovery units.
11. The operator shall provide a list of key arrestment plant and should have a written procedure for dealing with its failure, in order to minimise any adverse effects.

#### Continuous Monitoring

12. All continuous monitoring readings shall be on display to appropriately trained operating staff.
13. Continuous monitoring instruments shall be fitted with audible and visual alarms, situated appropriately to warn the operator of arrestment plant failure or malfunction



14. The activation of alarms shall be automatically recorded.
15. All continuous monitors shall be operated, maintained and calibrated in accordance Phillips 66 Ltd Procedure on the Operation and Routine Monitoring of the Vapour Recovery Unit (Document References HR-IPC-50008 & HR-IPC-50045). The relevant maintenance and calibration shall be recorded.
16. Emission concentrations may be reported as zero when the plant is off and there is no flow from the stack. If required a competent person shall confirm that zero is more appropriate than the measured stack concentration if there is no flow.
17. Any continuous quantitative monitor used shall provide reliable data >95% of the operating time, (i.e. availability >95%).

#### Representative Sampling

18. Sampling on a continuous or non-continuous basis, care is needed in the design and location of sampling systems, in order to obtain representative samples for all release points. Sampling points on new plant shall be designed to comply with the British or equivalent standards.
19. The operator shall ensure that relevant stacks or ducts are fitted with facilities for sampling which allow compliance with the sampling standards.

#### Control Techniques

20. The tank storage plan (document reference IPC layout 1835\_6200\_A012) submitted to the Regulator on the 21<sup>st</sup> July 2016 shows the location of those storage tanks currently available for petrol storage. The Regulator shall be notified in writing of any additional tanks to be used for the storage of petrol at site with details to be agreed prior to use.
21. The external wall and roof of tanks above ground 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.
22. Internal floating roofs shall be landed as infrequently as possible to avoid vapour release on re-commissioning.
23. All new storage installations at terminals where vapour recovery is needed to comply, shall be either:
  - tanks designed with a floating roof, either external or internal, equipped with primary and secondary seals; or
  - fixed roof tanks connected to a vapour recovery unit.
24. An external floating roof and seal system shall 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 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 EN14015 or equivalent

25. An internal floating roof and seal system should be deemed to achieve an overall containment of vapours of 90% or more compared to comparable fixed roof tank solely fitted with pressure/vacuum (P/V) relief valves if:
- the roof is fitted with a primary seal;
  - the seal extends from the floating roof to the tank wall;
  - the seal is designed to accommodate variations in the gap between the floating roof and the tank wall, and the tank and the roof complies with the requirements of BS EN14015 or equivalent

#### Loading and unloading of mobile containers at terminals

26. Displacement vapours from the mobile container being loaded must be returned through a vapour tight connection line to a vapour recovery unit for recovery at the terminal.
27. Vapour collection pipework, except for flexible hoses, shall be tested prior to initial commissioning as follows:
- where systems are made up of prefabricated lengths joined together mechanically, each length (including any permanent attachment of the jointing mechanism) shall be tested to a minimum pressure of 1 bar for a period of one hour. Assembly of mechanical joints should be subject to inspection;
  - where the systems are assembled with permanent joints (for example, welded, cemented) they should be tested to the above requirement on completion.

In-service monitoring shall comprise an annual visual examination of the system to check for integrity and alignment of the pipework and the joints.

An annual visual examination of bellows and flexible hoses used to connect mobile containers to the vapour collection pipework shall be undertaken to check for integrity; wear and security of connections.

28. If a leak occurs in the vapour collection system (including the vehicle) at a gantry during loading of an approved bottom loading vehicle, operations at that gantry shall be shut down until the leak is sealed. Equipment to facilitate such shut down operations shall be installed at the loading gantry. Operating instructions to loading personnel shall include provisions regarding the detection of leaks and reporting and shut down procedures.

#### Gantries

29. The liquid coupler on the loading arm shall be a female coupler which should mate with a 4-inch API (101.6mm) male adapter located on the vehicle.
30. The vapour-collection coupler on the loading-gantry vapour-collection hose shall be a cam-and-groove female coupler which should mate with a 4-inch (101.6mm) cam-and-groove male adapter located on the vehicle.
31. The liquid-loading rate shall not exceed the maximum 2,500 litres per minute per loading arm.



32. When the terminal is operating at peak demand, its loading gantry vapour collection system, including the Vapour Recovery Unit, shall be allowed to generate a maximum counterpressure of 55 millibar on the vehicle side of the vapour collection adapter, (this is equivalent to a maximum counterpressure of 45 millibar at the interface between the adaptor and coupler).
33. The loading gantry shall 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.
34. The vehicle shall be connected to the Control Unit on the 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.
35. The gantry Control Unit shall be suitable for both 2-wire and 5-wire vehicle systems.
36. 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.
37. The height of the centre line of the liquid adapters shall be:
  - maximum 1.4 metres (unladen); minimum 0.5 metres (laden), the preferred height being 0.7 to 1.0 metres;
  - the horizontal spacing of the adapters shall not be less than 0.25 metres (preferred minimum spacing is 0.3 metres);
  - all liquid adapters shall be located within an envelope not exceeding 2.5 metres in length;
  - the vapour-collection adapter shall be located preferably to the right of the liquid adapters and at a height not exceeding 1.5 metres (unladen) and not less than 0.5 metres (laden).
38. Loading shall not be permitted unless a permissive signal is provided by the combined earth/overflow control unit.
39. 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.
40. 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 flow from the vehicle into the vapour-collection system.

#### Training

41. All staff whose functions could impact on air emissions from the activity shall receive appropriate training on those functions. This should 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.

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 should be made available to the regulator on request.

#### Maintenance

43. 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

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:

