

Part B Application form

Application to vary a permit for a Part B service station to add PVR Stage II

Local Authority Pollution Prevention and Control
Pollution Prevention and Control Act, 1999
Environmental Permitting (England and Wales) Regulations 2007

Introduction

When to use this form

Use this form if you are applying for a variation to an existing service station permit in order to extend it to cover the operation of PVR Stage II.

A fee is only required to be enclosed if the variation involves a 'substantial change'. A substantial change is defined as "a change in operation which, in the opinion of the competent authority [the regulator] may have significant **negative** effects on human beings or the environment". (Closure of an existing service station and the building of a new replacement station at another location is likely to require a full fresh application, ie not constitute a variation.)

When complete, send the form and the fee and any additional information to:

Directorate of the Urban Environment. Claughton House. Blowers Green Road.
Dudley. West Midlands. DY2 8UZ. Tel: 01384 812345

If you need help and advice

We have made the application form as straightforward as possible, but please get in touch with us at the local authority address given above if you need any advice on how to set out the information we need.



LAPPC application form: to be completed by the operator		
For Local Authority use		
Application reference	Officer reference	Date received

A1.1. Name of the premises

Greenfields Connect.....

A1.2. Please give the address of the premises

Manor Way.....

Halesowen.....

.....

PostcodeB62 8RJ.....

Telephone.....01215044890.....

A1.3. Reference number of existing PVR Stage I permit for the installation

.....not known.....

A2.1. The applicant - Please provide the full name of company or corporate body or the name of the sole trader or the names of the partners

BP Oil UK Limited,
Licensing Department
3rd Floor Witan Gate House,
500-600 Witan Gate,
Milton Keynes,
MK9 1ES

Telephone:
01908 85 3380

Registered Office address

Chertsey Road,
Sunbury on Thames,
Middlesex,
TW16 7BP.

Registered in England and Wales, number 446915.

A2.2. Holding companies

Is the operator a subsidiary of a holding company within the meaning of section 1159 of the Companies Act 2006?

No

Yes

If yes? Name and address of ultimate holding company

BP P.L.C.
1 ST JAMES'S SQUARE
LONDON
SW1Y 4PD

Company No. 00102498

A3 Who can we contact about your application?

It will help to have someone who we can contact directly with any questions about your application. The person you name should have the authority to act on behalf of the operator - This can be an agent or consultant.

Name

Jan Martin-Read

Position

Licensing Co-ordinator

Address

BP Oil UK Limited,
Licensing Department
3rd Floor Witan Gate House,
500-600 Witan Gate,
Milton Keynes,
MK9 1ES

Telephone:

01908 85 3380

Fax number

email address

Jan.Martin-Read@UK.BP.com

B. About the installation

B1.1 Is PVR Stage II equipment already fitted:

No

Yes

B1.2 If the answer to B1.1 is "no",

a) when do you intend to fit it**N/A**

b) what arrangements are in place (eg contract with installers) to fit it **N/A**

B2.1 What systems have been installed or is it intended to install to comply with PVR Stage II?

BP Multiproduct dispensers as detailed in attachments.

Doc Reference**Attachment 1.....(BP PVR II System Info).....**

B2.2 What is or will be the vapour/petrol ratio?

.....**95% – 105%**.....

B2.3 Please attach process diagrams and plans of VPR Stage II system, including pipework layout.

Doc Reference**Attachment 2...(A3 print of Site Fuel System Drawing)**

B2.4 What arrangements will be/have been made for preventative maintenance of the PVR Stage II equipment.

BP manages maintenance of its company owned sites through centralised contracts. Maintenance is controlled through an on line ordering, despatch and recording system known as e-Maintenance (e-mtce) through which sites can access and track their maintenance needs.

e-Maintenance schedules and tracks works related to Stage 1b and Stage 2 VR equipment. A schedule of planned maintenance and testing is attached . Test certificates are retained in the e-mtce system, accessible on site.

Equipment faults identified by sites are entered into e-mtce and tracked to close out in the system. Faults noted on record sheet (Attachment 5), with e-mtce reference code, kept in PVR2 section of Site Register.

Doc Reference **Attachment 3 (Maintenance Schedule for PVR Systems)**

B2.5 What arrangements will be/have been made to ensure relevant staff are adequately familiar with/trained in the use of the PVR Stage II equipment.

Sites issued with descriptive leaflet (Stage II (PVR II) CO Site information) identifying system details and requirements for checking. PVR2 system checks and key characteristics incorporated in on line training modules

Doc ReferenceAttachment 4 (Stage II (PVR II) CO Site information)

B2.6 Please attach procedures and contingency measures in the event of vapour containment equipment failure (including the system for vapour recovery during filling of vehicle petrol tanks).

Equipment faults identified by sites through their daily and weekly check list systems are entered into e-mtce and tracked to close out in the system. Faults are manually noted on record sheet (attached), with e-mtce reference code, kept in PVR2 section of Site Register.

Doc Reference ...Attachment 5 (Stage II (PVR II) Operating Record)

B2.7 Please provide a certificate to confirm conformity of the PVR Stage II equipment with approval for use under the regulatory regimes of at least one European Union or European Free Trade Association country and to confirm that the hydrocarbon capture efficiency of the equipment is not less than 85% (ie that at least 85% of the displaced vapours are recovered, according to the relevant 'type approval' test (see Section 5.16 of PG1/14(06)), expressed as the ratio of the volume of hydrocarbon vapours displaced to the volume of petrol discharged.

Doc Reference ...Attachment 6A (Wayne TUV Type Approval Certificate)
Attachment 6B (Tokheim TUV Type Approval Certificate)

B2.8 What arrangements will be put in place to test delivery systems and vapour recovery systems, including the testing of the vapour/petrol ratio? Please provide details of testing of the vapour containment integrity in accordance with the manufacturer's specifications (to be undertaken prior to commissioning and periodically at least once every 3 years thereafter and always following substantial changes or significant events that lead to the removal or replacement of any of the components required to ensure the integrity of the containment system).

Annual tests scheduled in e mtce as identified in B2.4. Specific Procedure for Wayne equipment attached as reference. Tokheim similar .

Doc Reference ...Attachment 7 (Dresser Wayne Vapour Recovery – Test and Calibration)

B2.9 Is an "automatic monitoring system" installed, or will it be installed, to automatically detect faults in the proper functioning of the petrol vapour recovery system including the automatic monitoring system; to indicate faults to the operator; and to automatically cut off the flow of fuel on the faulty delivery system if the fault is not rectified within 1 week?

No

Yes

B3 Additional Information

Please supply any additional information, which you would like us to take account of in considering this application.

Charging levels for LAPPC Part B permits are based on a standard Regulatory Effort Assessment. To assist with this assessment a commentary on BP's proposed route to low risk compliance with the particular issues noted has been prepared and is attached here for reference.

Doc Reference: **Attachment 8 (LAPPC Compliance Effort Assessment)**

C1. Fees and Charges

C1.1. Please enclose the relevant sum if this variation involves a substantial change, and state the amount enclosed.

£ N/A

Cheques should be made payable to: N/A

We will confirm receipt of this fee when we write to you acknowledging your application.

C1.2. Please give any company purchase order number or other reference you wish to be used in relation to this fee.

N/A

C2. Annual charges

If we grant you a permit, you will be required to pay an annual subsistence charge. If you don't pay, your permit can be revoked and you will not be able to operate your installation.

C2.1. If different to details provided in relation to your current PVR Stage I permit, please provide details of the address you wish invoices to be sent to and details of someone we may contact about fees and charges.

Jan Martin-Read
Licensing Co-ordinator
BP Oil UK Limited,
Licensing Department
3rd Floor Witan Gate House,
500-600 Witan Gate,
Milton Keynes,
MK9 1ES

Telephone:
01908 85 3380

email address Jan.Martin-Read@UK.BP.com

C3. Commercial confidentiality

C3.1. Is there any information in the application that you wish to justify being kept from the public register on the grounds of commercial or industrial confidentiality?

No

If **Yes**, please provide full justification, considering the definition of commercial confidentiality within the EP Regulations (See the General Guidance Manual).

C4. Data Protection

The information you give will be used by the Local Authority to process your application. It will be placed on the relevant public register and used to monitor compliance with the permit conditions. We may also use and or disclose any of the information you give us in order to:

- consult with the public, public bodies and other organisations,
- carry out statistical analysis, research and development on environmental issues,
- provide public register information to enquirers,
- make sure you keep to the conditions of your permit and deal with any matters relating to your permit
- investigate possible breaches of environmental law and take any resulting action,
- prevent breaches of environmental law,
- offer you documents or services relating to environmental matters,
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows)
- assess customer service satisfaction and improve our service.

We may pass on the information to agents/ representatives who we ask to do any of these things on our behalf.

It is an offence under regulation 38 of the EP Regulations, for the purpose of obtaining a permit (for yourself or anyone else) to:

- make a false statement which you know to be false or misleading in a material particular,
- recklessly make a statement which is false or misleading in a material particular.

If you make a false statement

- we may prosecute you, and
- if you are convicted, you are liable to a fine or imprisonment (or both).

C5 Declaration: previous offences (delete whichever is inapplicable)

I/We certify

EITHER : No offences have been committed in the previous five years which are relevant to my/our competence to operate this installation in accordance with the EP Regulations.

~~OR :The following offences have been committed in the previous five years which may be relevant to my/our competence to operating this installation in accordance with the Regulations:~~



Signature

Name Jan Martin-Read Position Licensing Co-ordinator
Date: Sep 2009

6 Declaration

C6.1 Signature of current operator(s)*

I/We certify that the information in this application is correct. I/We apply for a permit in respect of the particulars described in this application (including supporting documentation) I/We have supplied.

Please note that each individual operator must sign the declaration themselves, even if an agent is acting on their behalf. **See Attachment 9 BP Signing Authority**

For the application from:

Premises name Greenfields
Connect.....



Signature

Name: Jan Martin-Read Position: Licensing Co-ordinator
Date: Sep 2009

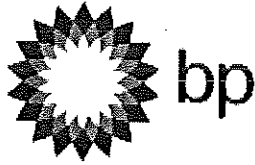


Signature

Name: Jan Martin-Read Position: Licensing Co-ordinator
Date: Sep 2009

** Where more than one person is defined as the operator, all should sign. Where a company or other body corporate – an authorised person should sign and provide evidence of authority from the board of the company or body corporate.*

BP Petrol Vapour Recovery Stage II (PVR II) System Information



Design Policy

BP has been fitting Petrol Vapour Recovery Stage II on all new sites built in the UK since January 2000.

BP has sites equipped with both Wayne and Tokheim Multiproduct pumps all built from new to incorporate Stage 2 Vapour Recovery

Fault Monitoring

The correct functioning of the Stage 2 VR system in the dispenser is automatically monitored by the pump computer. Repeated fault codes generated by the vacuum pump or the proportional valve control systems of the dispenser are converted by the dispenser computer to a visual signal in the form of a continuous red LED located on the dispenser dial face.

Fault LED's visible during routine regular checks of the dispensers by site staff will be recorded in the fault log and a maintenance call made.



Fig1. Wayne dial face with Fault LED
Note: On Tokheim Dial Face LED is separate at the left hand end of the litres display

An illuminated LED can only be cancelled by an engineer intervention.

Functioning of the LED and the monitoring function is confirmed when a green (red on Tokheim) LED in the same location as shown above will blink once on completion of every petrol sale.

The BP Stage 2 Vapour Recovery System

BP, in the UK, uses dispensers supplied by Dresser Wayne or Tokheim built in accordance with EN 13617. These dispensers are factory fitted with the required vapour recovery equipment.

The Stage 2 vapour recovery solutions used in the dispensers from these suppliers have been tested for compliance against vapour recovery test method VDI 4205 by TUV in Germany.

These require average 85% efficiency of recovery over a specified range of vehicles with the vapour pumps controlled to a 95% - 105% vapour: liquid ratio.

Annual simulated flow tests by approved maintenance contractors ensure that the system remains in the 85% - 115% Vapour : Liquid ratio required in DEFRA PG1-14(06) and are adjusted as appropriate.

Dispensers are fitted with a fault indication system which is visible in the dial face area. Should there be a fault with the power to the vapour pump or with the valve control system the fault LED is illuminated and remains illuminated until the problem is rectified by a maintenance engineer. Site staff frequently check dispensers for proper operation of the VR system and maintain a fault log. Permit compliance, Maintenance services and the annual service check are managed and tracked centrally from BP's UK Retail Head Office at Witton Gate House, Milton Keynes.

All equipment for use in hazardous atmospheres is tested, certified and marked in accordance with the requirements set out under the ATEX 100 (Equipment) directive.



Wayne Pignone
Dresser Wayne Pignone,
Butterfield Industrial Estate,
Bonnyrigg,
Midlothian.
Scotland.
EH19 3JQ
Tel: +44(0)1875 402140

If you have any questions with regard to the Design and Operation of BP's Vapour recovery systems please email:

Phil Lambeth, European Design Manager,
BP Global Fuels Technology / Global Alliance
phil.lambeth@bp.com

Equipment Components

BP's petrol dispensers are fitted with:

- An Elaflex ZVA vapour recovery nozzle, slimline 21/8 coaxial hose, Swivel break coupling and splitter adaptor on each of the petrol supply hoses.
- Two piston vapour pumps, one for each side of the dispenser.

In Wayne Equipment - Gardner Denver Thomas type 8014-5.0/6.0

In Tokheim Equipment - Duerr Technik MEX 0831-11

- Two proportional control valves, one for each side of the dispenser which are electronically controlled to moderate the return flow in line with the fuel delivery flow rate.

In Wayne equipment - Burkert 6022 / 2832

In Tokheim equipment - ASCO JV13285902-24v type EMXX

- A Risbridger 1" double poppet shear valve.

Vapour is returned to the most appropriate underground petrol tank through a manifolded 2" vapour return pipe.

Wayne Approval

certificate of approval issued by TUV Sudeutschland in Oct, 2002, updated Feb 2007.

Certificate Number TUV 85-2.127.1
Max delivery rate of 38 litres per minute
Max back pressure 150 mbar
Air test correction factor 1.09

Tokheim Approval

certificate of approval issued by TUV Sudeutschland in Aug 2007.

Certificate Number TUV 85 A/L 2.1:
Max delivery rate of 40 litres per minute
Max back pressure 50 mbar
Air test correction factor 1.10



Tokheim,
Unit 1 Baker Road
West Pitkerro Industrial Estate
Dundee
Scotland
DD5 3RT
Tel: +44 (0) 1382 483500

Issued by: BP – Global Alliance
July 2009, v 0
BP PVR II System Info

Global Alliance

BP Oil UK Ltd

Maintenance Schedule for Petrol Vapour Recovery (PVR) Systems

Systems include all equipment pipework and processes required for :

PVR Stage 1b - transfer of vapour displaced from the underground storage tanks during filling from the delivery road tanker from the vents to the road tanker.

PVR Stage 2: - collection of vapour displaced from vehicle tanks while being filled at petrol dispensers and transfer to the underground fuel storage tanks.

1. Maintenance Contract

The maintenance contract is administered by BP Oil UK Ltd

Contact: The Fuels Maintenance Manager
BP - Global Alliance
Witan Gate House
Central Milton Keynes
MK9 1ES

Tel 01908 853616

2. Site Particulars

- a. See site layout plans attached for an indication of principal components comprising:
 - i. Storage tanks, tank fill points and vapour connection, tank vents and vent manifold, fuel dispensers

3. Maintenance Schedule

- a. Pressure /Vacuum/Orifice vent valve - located at top of petrol vents valve to be visually checked annually for correct and free operation, replace if defective. Check and clear flame arrestor gauze as needed, replace if defective, replace valve every 3 years.
 - i. Type fitted - Risbridger RIS-VENT with orifice or equivalent
- b. Vapour recovery adaptor (for connection of the tanker vapour hose) to be checked for tightness when closed and for correct and free operation, report for replacement / corrective action if defective. check and clear flame arrestor cartridge (where fitted) .
 - i. Vapour adaptor type fitted - Risbridger Vapour Retainer ref 3416 or equivalent
- c. Check continuity of electrical bonding while progressing other checks (visual only – annual electrical test will confirm proper earthing) report any defects
- d. Pipework – carry out annual tightness test of vapour containment system to include offset fills, vent pipes, vent manifold and vapour return pipes. Report any defects.
- e. Carry out visual check of dispenser external hoses, nozzles and associated fittings to confirm no damage which might potentially allow the loss of liquid or vapour. Report any defects for correction.
- f. Signage - confirm all appropriate signage is present and complete including tank contents labels identifying tank No., capacity and grade, vent labels identifying which tank they are connected to and all statutory safety signs at vents and fill points.

Petrol Vapour Recovery Stage II (PVR II) CO Site Information

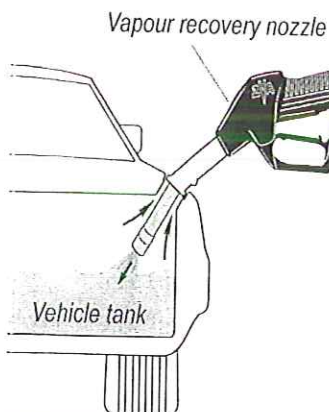
The Technical Stuff

- Pumps are fitted with
- a special nozzle (1), coaxial hose and splitter adaptor
 - a vacuum vapour pump (3) for each sides of the dispenser
 - an electronically controlled valve (2) in the pump which matches the vapour recovery flow rate to the fuel delivery flow rate

Stage II of what ?

Petrol Vapour Recovery **Stage 1** was introduced in 2000 and required the collection of petrol vapour displaced during the loading and unloading of the Petrol Tanker. All sites in the UK are now fitted with PVR1.

PVR II will collect the vapour displaced from car fuel tanks as they are filled on the forecourt



The Legal Bit

PVR II is regulated in England and Wales, Scotland and Northern Ireland under the regional versions of **The Pollution Prevention and Control Regulations, 2000**.

Your site requires a permit to operate Vapour Recovery Systems which is granted by your local councils Environmental Health Department and is renewed annually by the licensing coordinator in WGH.

A copy of this permit and any specific conditions of the permit must be retained on site.

All sites selling more than 3.5 million litres of petrol a year must be fitted with Stage II Petrol Vapour recovery from 1st January 2010. All new sites built after that date (including major modifications), which will sell more than 0.5 million litres of petrol a year must also be fitted.

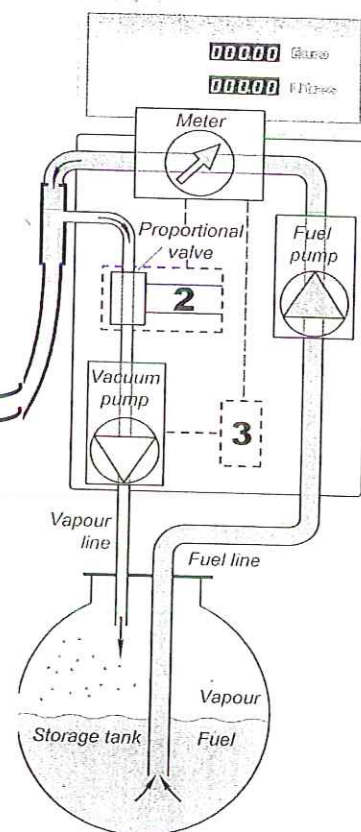
There is no UK certification but the performance of PVR II systems must be certified as achieving 85% efficiency to one or more of the existing standards in Germany, Sweden, France, Austria or the Netherlands.

Once installed operators must ensure the system is working properly and recovering vapour at a rate between 85% and 115% of the fuel flow rate. Regular weekly checks must be made to ensure the system is operating (see The Red Light Area) and annual flow tests will be carried out by maintenance to check the recovery efficiency. Any faults must be recorded in a log maintained on site.

ATEX 137 Worker Protection Directive (HSAW)
The employer / owner of the site is responsible for ensuring that explosion risks have been assessed and that equipment is correctly designed, operated and maintained.

All equipment for use in hazardous atmospheres must be tested, certified and marked in accordance with the requirements set out under the ATEX 100 (Equipment) directives.

BP has been operating Stage 2 on many sites in the UK since early in 2000. We also have extensive experience of operating vapour recovery systems in many countries in Europe. If you need further information please get in touch with the maintenance centre in Witan Gate House



There is also a vapour pipe connecting the pump back to one of the petrol tanks. Vapour lines from all pumps are connected to a single connection. A safety break valve at the pump base prevents vapour escape if the pump is knocked over.

The Red Light Area

Site staff need to check dispenser displays at least once every week to confirm the correct functioning of the Stage 2 VR system. If a fault occurs with the vapour pump or the control valves the dispenser displays an illuminated red LED located on the dispenser dial face.



(on Tokheim pumps the light is just below the litres display)
If you see this red light log it against pump no and date and report the fault to the maintenance centre in the usual way.

An illuminated LED can only be cancelled by an engineer intervention.

Correct functioning is confirmed at the end of every petrol sale when a green (red with Tokheim) LED will blink once.

WHY ?

Petrol vapour which escapes into the atmosphere is directly connected to an increase in ground level Ozone, a major pollutant which causes breathing disorders and other health problems in humans and is poisonous to plants. Petrol Vapour Recovery Stage II in the UK will prevent the release of 30,000 tonnes of vapour into the atmosphere which will achieve significant reductions in ground level ozone.

Issued by: BP Oil UK Ltd
April 2009
PVR II CO Information v0

