

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:

Justin Hanson
Directorate of the Urban Environment
Environmental Protection
Claughton House
Blowers Green Road
Dudley
West Midlands
DY2 8UZ

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
Kingswinford 2780

A1.2. Please give the address of the premises
Moss Grove
Kingswinford
West Midlands

Postcode: DY6 9HP

Telephone: 01384 557100

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

Ref number: 1520-78D-15

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

Tesco Stores Limited
Tesco House
Delamare Road
Cheshunt
Herts
EN8 9SL

Company Registration: 519500

Trading/business name (if different)

.....
Registered Office address (**All correspondence to address below**)

PO BOX 400
Cirrus B
Shire Park
Welwyn Garden City

Postcode: **AL7 1AB**

Telephone: **01707 634088**

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 of ultimate holding company

Ultimate holding company registered office address

.....

.....

.....

PostcodeTelephone.....

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: **Stephen Conway / Lauren Brown**

Position: **Regional Health, Safety & Environment Manager / Project Coordinator**

Address PO Box 400
Cirrus B
Shire Park
Welwyn Garden City

Postcode AL7 1AB Telephone: **01707 634630**

Fax number: **01992 811258** email address: **Lauren.A.Brown@uk.tesco.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
- b)
- c) what arrangements are in place (eg contract with installers) to fit it

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

**Gilbarco Open Active Stage II Vapour Recovery system.
All Gilbarco pumps fitted with Gilbarco VMC Automatic monitoring system with external status LEDs.**

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

Gilbarco Stage II VR system calibrated and certified with P/V ratio 95% to 105% using air test and external gas meter. Automatic monitoring ensures system operation between 85% and 115%.

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

Doc Reference:

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

Doc Reference: **There is no specific preventative maintenance specified by Gilbarco for our Stage II VR systems when fitted with Automatic monitoring. Any problem will result in the system informing the operator of the system status and 7 days later the pump petrol nozzles will be disabled if problem has not been resolved. The system is tested and certified every 3 years as per the DEFRA PGN 1.14(06) and FEF COP on Stage II VR.**

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

Doc Reference: **Appendix B “Vapour Recovery Procedure”**

All relevant members of staff will be trained in the day to day operational requirements of this equipment, documented by a training programme. The existing training programme will be extended to cover stage II.

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).

Doc Reference: **Appendix A “Vapour Recovery Alarm Indicators”**

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: **Appendix C “Gilbarco Compliance 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).

Doc Reference: **Integrity testing of the stage II vapour recovery system fitted to the pumps is achieved by the following test. Vacuum test on pipework and stage II VR components at 700mB as per FEF COP Section 10.5.1. This is carried out when system retrofitted, every three years and when relevant components are changed. This test is indicated on the FEF Compliance certificate issued when pumps put into use, after annual or 3 yearly testing or after repair.**

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.

Doc Reference: **Appendix D "Assessment for Possible Environmental Impact"**
Appendix E "Site certificate"

C1. Fees and Charges

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

£.....no fee.....

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.

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.

...Tesco Stores, PO Box 400, Cirrus B, Shire Park, Welwyn Garden City,
Hertfordshire,

Postcode...AL7 1QFTelephone.....01707 634088.....

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

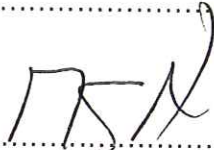
EITHER

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

.....**Site permit has been reviewed and no notifications of previous offences have been found. If however you are aware of any issues please inform us**.....

Signature



Name **Michael Mackay**

Position **Head of Safety (Property)**

Date 8/10/09...

6 Declaration

C6.1 Signature of current operator(s)*

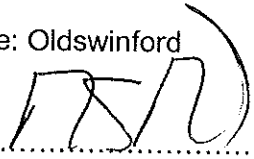
We certify that the information in this application is correct. We apply for a permit in respect of the particulars described in this application (including supporting documentation) We have supplied.

Please note that each individual operator must sign the declaration themselves, even if an agent is acting on their behalf.

For the application from: Tesco Stores Limited

Premises name: Oldswinford

Signature



Name: **Michael Mackay**

Position: **Head of Safety (Property)**

Date

8/10/09

** 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.*



VAPOUR RECOVERY ALARM INDICATORS (TRAFFIC LIGHTS)

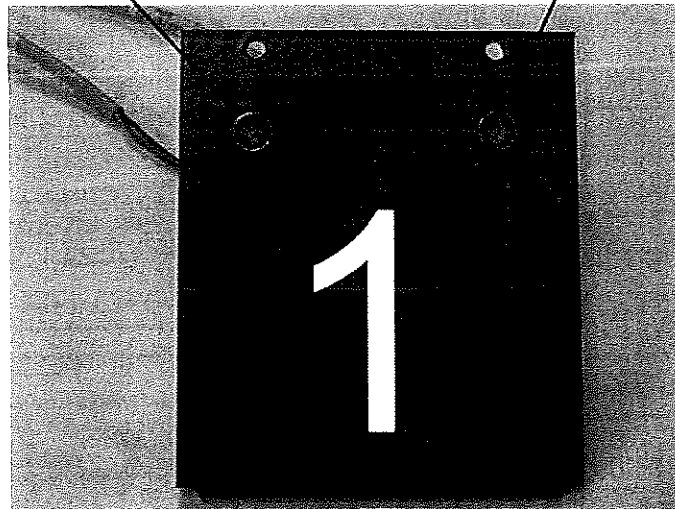
Your dispensers may be fitted with either one or two LED indicators ('Traffic Lights') on the display.

These are to indicate the status of the vapour recovery system and to alert you as to possible problems that may be about to occur, giving you time to arrange a service call.

If your dispensers are Eurolines, the traffic lights will be found on one side of the display head and will look as follows:

LED for left hand side of dispenser

LED for right hand side of dispenser



The traffic lights will display one of three colours after a transaction (either green, amber or red).

THESE SHOULD BE CHECKED ON A DAILY BASIS!

The meaning of these is as follows:

Green - The vapour recovery system is OK and working within prescribed limits.

Amber - A series of consecutive transactions have fallen outside the vapour recovery tolerance.
The dispenser is now in alarm condition and will shut down in 7 days!

ARRANGE A SERVICE CALL AS SOON AS POSSIBLE!

Red - The fault has not been fixed within 7 days and the dispenser has therefore shut down!

Vapour Recovery procedure

Appendix B

Supports

- ✓ The staff are great
- ✓ An interesting job
- ✓ Keeping Safe & Legal

Purpose

To help staff to understand what Vapour Recovery means and how it affects the operation of the petrol station.

What Good Looks Like

- Staff understand what Vapour Recovery entails and how it affects them.
- Staff can respond to questions asked by an Environmental Health Officer confidently.

Vapour Recovery Stage 1b

The Pollution & Prevention Control Act 1999 stipulates that the vapour displaced at the time of a fuel delivery must be prevented from entering the atmosphere. Information

To comply with this legislation, all Tesco Petrol Stations have a Stage 1b Vapour Recovery system installed. The system comprises of a series of pipes that enables the petrol vapour displaced at the time of a tanker delivery to be returned to the tanker. The tanker will, in turn, take the petrol vapour back to the depot where it will be safely processed.

The tanker driver must attach the hose to the Vapour Recovery connection before delivering any petrol. Failure to do so can create a massive build up of pressure that will result in a major fuel spillage.

The vapour recovery connection is recognisable by its 'orange' cap and must, by law, have a sign attached (as shown in the picture below).



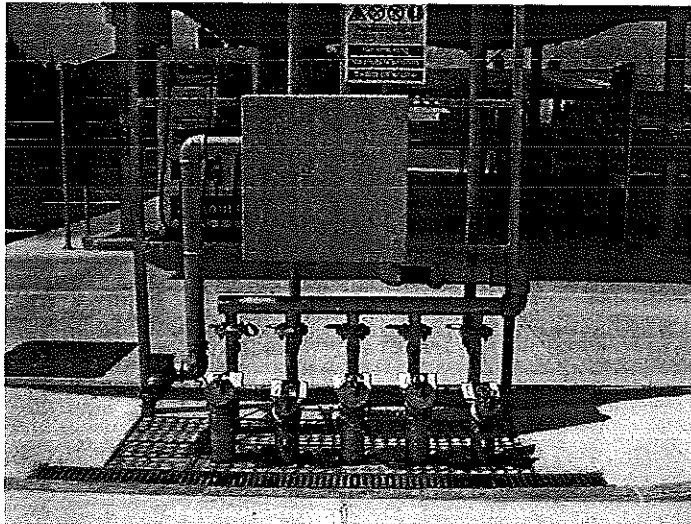
Note: Further information on the procedures for when there is an excessive vapour loss can be found in the 'Fuel Deliveries' section, 'Abnormal Vapour Loss procedure'.

Stage 1b Vapour Management

A growing number of Tesco forecourts now have a Vapour Management system installed. At the time of delivery, rather than the 'rich' petrol vapour being returned to the delivery tanker, the Vapour Management system balances the vapour across all the underground (petrol) tanks. This enables Tesco to retain the rich vapour within the underground storage tanks which will eventually condense back into fuel.

Information

See picture below for an example of the Vapour Management system.



Stage 2 Vapour Recovery

Petrol contains volatile organic compounds which evaporate inside the fuel tank of a vehicle and fill the air space above the liquid fuel.

Information

Petrol vapour escapes when drivers fill the empty or partially empty tanks of their vehicles at a petrol station. This petrol vapour is forced out from the fuel tank by the incoming fuel and, unless controlled, escapes into the atmosphere through the filler neck of the fuel tank.

Petrol vapour recovery systems can be installed at petrol stations to reduce the amount of petrol vapour that escapes to the atmosphere from vehicle refuelling; these are known as 'stage 2' controls.

Most Stage 2 Vapour Recovery systems comprise of a vacuum within the nozzle and hose that sucks the vapour, displaced at the time of the customer dispensing fuel, back into the pump.

Information

At this point it can either be returned to the underground storage tank or condensed back into fuel at the pump.

The Department for the Environment have stipulated, by law, that all sites that sell over 3.5 million litres of 'petrol' per year must have a Stage 2 Vapour Recovery system installed prior to the 1st January 2010.

Information

Note: Tesco are rolling out two solutions for Stage 2 Vapour Recovery.

CleanAir – a small standalone unit which sits next to the dispenser. Some sites with Petrotec pumps have this unit built in.

Standard VR2 – captured vapour returns down a pipe to the tank farm and is processed by a condensing unit.



Industrie Service

Zertifikat Nr. 85-2.156

Certificate No. 85-2.156

Die Prüfstelle für Gasrückführungssysteme der TÜV SÜD Industrie Service GmbH, Westendstr. 199, D-80686 München, bescheinigt die Prüfung gemäß dem Merkblatt: „Systemprüfung für aktive Gasrückführungssysteme und deren Überwachungssysteme in Deutschland (Merkblatt I)“ vom 17.6.2002 für folgendes Gasrückführungssystem:

The TÜV SÜD Industrie Service GmbH Test Body for Vapor Recovery Systems, Westendstr. 199, D-80686 Munich, certifies having conducted tests as per the following code: "Testing of active vapour recovery systems and their monitoring devices in Germany (Code I)" of June 17, 2002 on the following vapor recovery system:

- Zapfventil: **ELAFLEX ZVA 200 GR**
Fuel-hose nozzle:
- Schlauch: **ELAFLEX Conti Slimline 21/8 Coax**
Hose:
- Steuerventil: **Bürkert 6022 / 2832,**
Control valve: **Ansteuerung Gilbarco VRC 390 und 390/2**
Gilbarco control VRC 390 and 390/2
- Gasrückführungs-
pumpe: **Gardner Denver Thomas 8014-5.0, 8014-6.0**
Vapour recovery pump:

Folgende Randbedingungen sind bei der Installation einzuhalten:
The following general conditions must be observed during installation:

- maximaler Kraftstoffvolumenstrom: **42 l/min**
Maximum volumetric fuel-flow rate:
- maximaler Gegendruck in der Rückführleitung: **75 mbar**
Maximum counter pressure in recovery line:
- Korrekturfaktor für die Systemeinstellung mit Luft bei simuliertem Kraftstoffvolumenstrom von 38 l/min: **1,08**
Correction coefficient for system settings with air by simulation of a volumetric fuel-flow rate of 38 l/min.

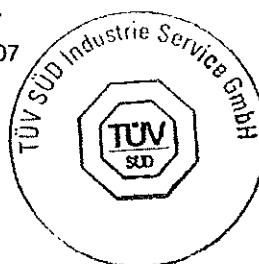
Der geforderte Wirkungsgrad von mindestens 85 % wurde nachgewiesen.
The required minimum efficiency ratio of 85% was proved.

Das Gasrückführungssystem entspricht dem Stand der Technik im Sinne der 21. BImSchV (Verordnung zur Begrenzung der Kohlenwasserstoffemissionen bei der Betankung von Kraftfahrzeugen) vom 07.10.1992 zuletzt geändert am 6.5.2002.

The vapour recovery system corresponds to the state of the art as defined in the 21st BImSchV (Air-pollution Control Regulation on the restriction of hydrocarbon emissions during vehicle refueling) of October 7, 1992, last amended on May 6, 2002.

München, 11.09.2007
Munich, 11 September 2007

Der Sachverständige
The officially authorized expert



Peter Szalata
Peter Szalata

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ CERTIFICADO ◆ CERTIFICAT

**TESCO ASSESSMENT FOR POSSIBLE ENVIRONMENTAL
IMPACT OF STAGE 1B AND STAGE 2 VAPOUR RECOVERY
DOC B3.1**

B3.1

ASSESSMENT OF POTENTIAL LOCAL ENVIRONMENTAL EFFECTS

The potential for local environmental effects is negligible under normal operating conditions.

During tanker off loading of fuel the stage 1b vapour recovery system operates under negative pressure created by the drop of fuel level in the road tanker compartments. The negative pressure means that emission to atmosphere will not occur under normal operating conditions from the underground storage tank vents.

Towards the end of the delivery positive pressure in the system does occur as the ullage space in the storage tanks is reduced. The levels of pressure have been recorded and are well below the 35mm bar pressure relief setting on the side of the pressure vacuum valve fitted to the vent pipes of the underground storage tanks. Again no emissions to atmosphere occur.

The stage 2 vapour recovery system provides at least a 85% hydrocarbon capture efficiency. Where the automatic monitoring system detects ten consecutive failures to achieve capture of hydrocarbons between 85% and 115% efficiency in the filling operation a fault is notified. If the fault is not rectified within one week the dispenser will automatically shut down until the fault is resolved. Emissions to atmosphere will therefore only fall within the permitted levels.



GILBARCO

VEEDER-ROOT

GVR - FEF

**STAGE II VAPOUR RECOVERY
COMPLIANCE CERTIFICATE**

KINGSWINFORD EXPRESS ESSO

08-Apr-08

GVR - FEF Stage II Vapour Recovery Test Certificate

Completed certificate to be kept on site with site records and a copy retained by the contractor.

PART A. Work and Equipment Record

Date:

Engineer Name: S.WALTON
Site Name & Operator: KINGSWINFORD EXPRESS ESSO
Address of site: MOSS GROVE KINGSWINFORD
WEST MIDLANDS
DY6 9HP
Dispenser/Pump Make & Model: Gilbarco Euroline
Vapour Recovery system fitted: Burkert & ASF Thomas
Vapour Recovery monitoring system fitted: Gilbarco VMC

Tick all boxes that apply:

- New Installation
- New Pumps with Stage II
- Stage II retrofit
- Automatic monitoring retrofit
- Work on Vapour Recovery System
- Work on Automatic Monitoring System
- Ordered by customer or other agency
- Annual periodic test
- 3 yearly periodic test
- Test after modification or repair
-

Remarks:

GVR - FEF Stage II Vapour Recovery Test Certificate

PART B. VR Efficiency Test Record

The manufacturer's documentation, including approval certificate, contains data required for efficiency tests.

Correction factor for air (in manufacturer's documentation):

Maximum certified fuel flow rate: 42 L/min Outdoor temperature: 5°C

Tolerance range for V/P ratio: 95% to 105%

Pump side	Pump Number	Grade Name		V/P ratio at air test flow rate			
				Before adjustment		After adjustment (if applicable)	
				[%]	[l/min]	[%]	[l/min]
1	2	G1	Unleaded	100	38		
		G2	Supreme Unl	98	38		
		G3					
2	1	G1	Unleaded	98	38		
		G2	Supreme Unl	98	38		
		G3					
1	4	G1	Unleaded	98	38		
		G2	Supreme Unl	96	38		
		G3					
2	3	G1	Unleaded	100	38		
		G2	Supreme Unl	98	38		
		G3					
1	6	G1	Unleaded	101	38		
		G2	Supreme Unl	102	38		
		G3					
2	5	G1	Unleaded	101	38		
		G2	Supreme Unl	100	38		
		G3					
1		G1					
		G2					
		G3					
2		G1					
		G2					
		G3					

If more than 4 pumps see additional page 2A.

Note: If the Vapour Recovery monitoring device is equipped with a regulation or correction function then this has to be disabled during the measurements.

If an Automatic Monitoring system is fitted, is this operating correctly - indication for normal operation, alarm condition and stop condition. **YES**

Date of this inspection: 08/04/2008

Date next inspection due: 08/04/2011

Certifying Engineer: S.WALTON

ADDITIONAL PUMPS

Pump side	Pump Number	Grade Name	V/P ratio at air test flow rate			
			Before adjustment		After adjustment (if applicable)	
			[%]	[l/min]	[%]	[l/min]
1		G1				
		G2				
		G3				
2		G1				
		G2				
		G3				
1		G1				
		G2				
		G3				
2		G1				
		G2				
		G3				
1		G1				
		G2				
		G3				
2		G1				
		G2				
		G3				
1		G1				
		G2				
		G3				
2		G1				
		G2				
		G3				

Note: If the Vapour Recovery monitoring device is equipped with a regulation or correction function then this has to be disabled during the measurements.

If an Automatic Monitoring system is fitted, is this operating correctly - indication for normal operation, alarm condition and stop condition. **YES** **NO**

Date of this inspection:

Date next inspection due:

Certifying Engineer:

GVR - FEF Stage II Vapour Recovery Test Certificate

PART C. Initial Installation Inspection and Test

Leak test executed and passed on Vapour Recovery pipes & components:

Inside of dispenser (retrofit kits)

Between dispenser and tank

Test steps		Details - Pass/Fail or Values			
		P1/2	P3/4	P5/6	P7/8
1	Conforms with installation instructions.	PASS	PASS	PASS	
2	Visual inspection of Vapour Recovery system for security of fittings.	PASS	PASS	PASS	
3	Visual inspection of Vapour Recovery monitoring device - if fitted.	PASS	PASS	PASS	
4	Leak test to internal dispenser pipes and components. (Retrofit kits)	PASS	PASS	PASS	
5	Leak test to pipes connecting dispenser to tank or other external systems.	N/A	N/A	N/A	
6	Running of Vapour Recovery pump - no loose or vibrating pipes.	PASS	PASS	PASS	
7	Confirm operation of Vapour Recovery monitoring device and alarm test. <i>Note 1</i>	PASS	PASS	PASS	
8	Dry measurement at each petrol nozzle.	PASS	PASS	PASS	

Test steps		Details - Pass/Fail or Values			
		P9/10	P11/12	P13/14	P15/16
1	Conforms with installation instructions.				
2	Visual inspection of Vapour Recovery system for security of fittings.				
3	Visual inspection of Vapour Recovery monitoring device - if fitted.				
4	Leak test to internal dispenser pipes and components. (Retrofit kits)				
5	Leak test to pipes connecting dispenser to tank or other external systems.				
6	Running of Vapour Recovery pump - no loose or vibrating pipes.				
7	Confirm operation of Vapour Recovery monitoring device and alarm test. <i>Note 1</i>				
8	Dry measurement at each petrol nozzle.				

Note 1 The alarm signal and the switch off function has to be tested for every nozzle if the switch off function is nozzle specific.

Date of inspection: 08/04/2008

Certifying Engineer: S.WALTON