



IPSWICH BOROUGH COUNCIL
ENVIRONMENTAL
18 FEB 2009

Received by
VPA 24.03.09

Ipswich Borough Council
Environmental Protection Services
Civic Centre
Civic Drive
Ipswich
IP1 2EE

Shell U.K. Oil Products Limited
Retail
PO Box 403
Staines
TW18 3ZB
United Kingdom
Tel +44 (0) 1784 897 852
Fax +44 1784 897 845
Internet <http://www.shell.com/uk>

17th February 2009

Vapour Recovery Stage II Application

Dear Sir/Madam

Please find enclosed the completed application form regarding Vapour Recovery Stage II for Site:

- 1) Shell Whitehouse

Could you please send all correspondence and invoice for payment to the following address: -

Kerry Toms
Shell U.K Oil Products Ltd
P.O. Box 403
Staines
TW18 3ZB

Mrs Von Etzdorf

Full responsibility for forwarding the Vapour Recovery Permit to the sites will be undertaken by the administrator of Shell U.K Limited.

Yours faithfully

Kerry Toms
Retailer Contracting Assistant

LA-IPPC application form: to be completed by the operator

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

A1 Applicant details : Shell UK Limited

A1.1 Name of the installation

SHELL WHITEHOUSE

A1.2 Please give the address of the site of the installation

665 -667 NORWICH ROAD, IPSWICH SUFFOLK

Postcode IP1 6JZ Telephone 01473 238950

If known, the Ordnance Survey national grid reference *8 characters*,
for example, SJ 123 456 (can be obtained from typing postcode into one of the on-line
mapping sites)

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A1.3 Existing permits:

Please give details of any existing LAPPC or LA-IPPC authorisation for the installation, or any waste management licences or water discharge consents, including reference number(s) and type(s):

Vapour Recovery Permit Stage 1 Permit number LAPPC PERMIT REG NO 1.2/RJD/13

Please provide the information requested below about the "Operator" - which means the person who it is proposed will have control over the installation in accordance with the permit (if granted).

A2.1 The operator – please provide the full name of company, partnership, or corporate body
Shell UK Limited

Trading/business name (if different)

Registered Office address

Shell Centre

York Road

London

Postcode: SE1 7NA

Principal Office address (if different)

Rourke House

PO Box 403

Staines Middlesex

Postcode: TW18 3BA

Company registration number

0140141

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', state name of ultimate holding company

Shell Transport and Trading Company PLC

Registered office address

Shell Centre

York Road

London

Postcode SE1 7NA

Principal Office address (if different)

Postcode

Company registration number: 00054485 _____

A3.1 Who can we contact about your application?

It will help is 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 Kerry Toms

Position Retailer Contracting Assistant

Address Rourke House

PO Box 403

Staines Middlesex Postcode TW18 3ZB

telephone number 0845 309 3091

fax number 01784897845

email address kerry.toms@shell.com

B1.2 Why is the application being made?

- The installation is new
- The installation is existing, but changes to the installation or to the EP Regulations means that an LA-IPPC A2 permit is required.

B2.1 Is the service station located under permanent living quarters or working areas?
See section 2 of PG1/14 (06)

<input checked="" type="radio"/> NO	<input type="radio"/> YES
-------------------------------------	---------------------------

B2.2 When was equipment for vapour collection during the filling of underground storage tanks installed or when will it be installed?

Not Known

B2.3 When was **equipment for vapour** recovery during filling of vehicle fuel tanks installed or when will it be installed (only for installations that are required to have a "stage II" vapour recovery system in place.)

23RD JULY 2008

B2.4 Volume of petrol unloaded into the service station in each of the last three calendar years (see section 2 of PG1/14 (06) for the relevant timescales) in cubic metres (i.e. litres divided by 1000) Circle the appropriate band

Year	VOLUME OF PETROL/m3				
	<100	100-500	501-1000	>1000	>3500
2005	<100	100-500	501-1000	>1000	>3500
2006	<100	100-500	501-1000	>1000	>3500
2007	<100	100-500	501-1000	>1000	>3500

B2.5 Are deliveries Driver "Controlled" / "Driver Unassisted"

<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
--	------------------------------

B2.6 At a maximum how many tanker compartments discharge into storage tanks at any one time or will do so once a vapour collection system is in place. If the latter information is not known a statement of what assessment will be made to determine this information and within what timescale. The information supplied under item 11 should be supplemented by a site specific assessment (See section 6 of PG1/14(06))

TWO

B2.7 Are diesel storage tanks connected to the vapour balance system?

<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
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B2.8 Measures taken or to be taken for vapour emission control, both during unloading and storage

VP Valves and stage 1 vapour recovery

B2.9 Please attach process diagrams and plans of vapour collection equipment (including height and location of vent pipes). This should include equipment for recovery of

vapours during filling of underground storage tanks and for instillations that are required to have a "stage II" vapour recovery system in place, for filling of petrol tanks.

B2.10 Unloading procedure and instructions (Please attach)

B2.11 Details of supervision, Training and Qualifications of Operating staff (Details should be specific to onsite staff and include general statements concerning delivery drivers)

B2.12 Schedule of maintenance of vapour collection control (including the system for vapour recovery during filling of vehicle petrol tanks for installations that are required to have a "Stage II" vapour recovery system in place) (please attach)

Three Year intervals as set out in section 21 of the Defra guide

B2.13 Schedule of examination and testing for vapour collection controls (including the system for vapour recovery during filling of vehicle petrol tanks for installations that are required to have a "Stage II" vapour recovery system in place) (please attach)

B2.14 Procedures or contingency measures in the event of vapour containment equipment failure (including the system for vapour recovery during the filling of vehicle petrol tanks for installations that are required to have a "stage II" vapour recovery system in place) (Please attach)

In accordance with section 5.20 of PG 1/14, faults of the vapour recovery system will be automatically detected and indicated to the operator. The monitoring system will cut off the flow of fuel on the faulty delivery system if the fault is not rectified within the 168 hour (1 week) timer period. In accordance with section 5.25 of PG 1/14 the operator will: Identify the cause and take corrective action. Record the cause and

corrective action taken. The repairer will retest to demonstrate compliance. Operator will notify Regulator on completion.

B2.15 For petrol stations that are required to have a "stage II " vapour recovery system in place only, a certificate to confirm conformity 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% (i.e. that at least 85% of the displayed vapours are recovered, according to the relevant "type approval" test (see section 5.16 of this note), expressed as the ratio of the volume of hydrocarbon vapours displaced to the volume of petrol discharged (Please attach)

B2.16 For petrol stations that are required to have a "stage II " vapour recovery system in place only, details of testing of the vapour containment integrity in accordance with the manufactures specifications (to be undertaken prior to commissioning and periodically at least once every three years thereafter and always following substantial changes or significant events that lead to the removal and replacement of any of the components required to ensure the integrity of the containment system) (Please attach)

Not Applicable Monitored System LED display on Pump

B2.17 For petrol stations that are required to have a "stage II " vapour recovery system in place only, is an "automatic monitoring system" 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	<input checked="" type="radio"/>	YES
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B.3.1 Provide an assessment of the potential significant local environmental effects of the foreseeable emissions (for example is there a history of complaints; is the installation in an air quality management area?)

No complaints received, the stage 2 system will improve air quality

Doc Reference: _____

B.3.2 Are there any sites of special scientific interest (SSSIs) or European sites which are within 500metres of the installation

NO	YES, please give names of the sites
	Doc Reference

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B.3.3 Provide an assessment of whether the installation is likely to have a significant effect on such sites and if it is to provide an assessment of the implications of the installation for that site, for the purposes of the Conservation (Natural Habitats etc) Regulations 1994.

Not Applicable

Doc Reference: _____

B4 Environmental Statements

B4.1 Has an environmental impact assessment been carried out under The Town and Country Planning (Environmental Impact Assessment)(England & Wales) Regulations 1999/293, or for any other reason with respect to the installation?

NO	YES, (please supply a copy of the environment impact Doc Reference
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B5 Additional Information

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

NO

Doc Reference _____

C1 Fees and Charges

The enclosed charging scheme leaflet gives details of how to calculate the application fee. Your application cannot be processed unless the application fee is correct and enclosed.

C1.1 Please state the amount enclosed as an application fee for this installation:

Cheques should be made payable to :

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, failure to do so will result in revocation of your permit and you will not be able to operate your installation.

C2.1 Please provide details of the address you wish invoices to be sent to and details of someone we may contact about fees and charges within your finance section.

Shell Shared Service Centre

PO Box 25071

72 Gordon Street, London

Postcode:G1 3WR

Telephone:

C3 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
- intentionally to make a false entry in any record required to be kept under any environmental permit condition
- with intent to deceive, to forge or use a document issued or required for any purpose under any environmental permit condition.

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).

C4 Declaration

C4.1 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.

For the application from:

Installation name: SHELL WHITEHOUSE

Signature 

Name Kerry Toms

Position Retailer Contracting Assistant

Date 17TH FEBRUARY 2009

Signature _____

Name _____

Position _____

Date _____

** 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.*

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GILBARCO
VEEDER-ROOT

GVR - FEF

**STAGE II VAPOUR RECOVERY
COMPLIANCE CERTIFICATE**

SHELL WHITEHOUSE

24-Jul-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: 24/07/2008

Engineer Name: S.WALTON

Site Name & Operator: SHELL WHITEHOUSE

Address of site: 665-667 NORWICH ROAD
IPSWICH SUFFOLK
IP1 6JZ

Dispenser/Pump Make & Model: Gilbarco SK700

Vapour Recovery system fitted: Gilbarco VRC 700 & GR125

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: LED TRAFFIC LIGHT EXPLAINED & UNDERSTOOD BY SITE MANAGER

SHELL WHITEHOUSE IPSWICH

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: 26°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	96	38		
		G2	V Power Unl	96	38		
		G3					
2	1	G1	Unleaded	96	38		
		G2	V Power Unl	96	38		
		G3					
1	4	G1	Unleaded	96	38		
		G2	V Power Unl	97	38		
		G3					
2	3	G1	Unleaded	96	38		
		G2	V Power Unl	97	38		
		G3					
1	6	G1	Unleaded	96	38		
		G2	V Power Unl	96	38		
		G3					
2	5	G1	Unleaded	97	38		
		G2	V Power Unl	97	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: 24/07/2008

Shell Whitehouse

Date next inspection due: 24/07/2011

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:

SHELL WHITEHOUSE IPSWICH
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.

Shell Whitehouse

Date of inspection: 24/07/2008

Certifying Engineer: S.WALTON



GILBARCO
VEEDER-ROOT

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.

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!

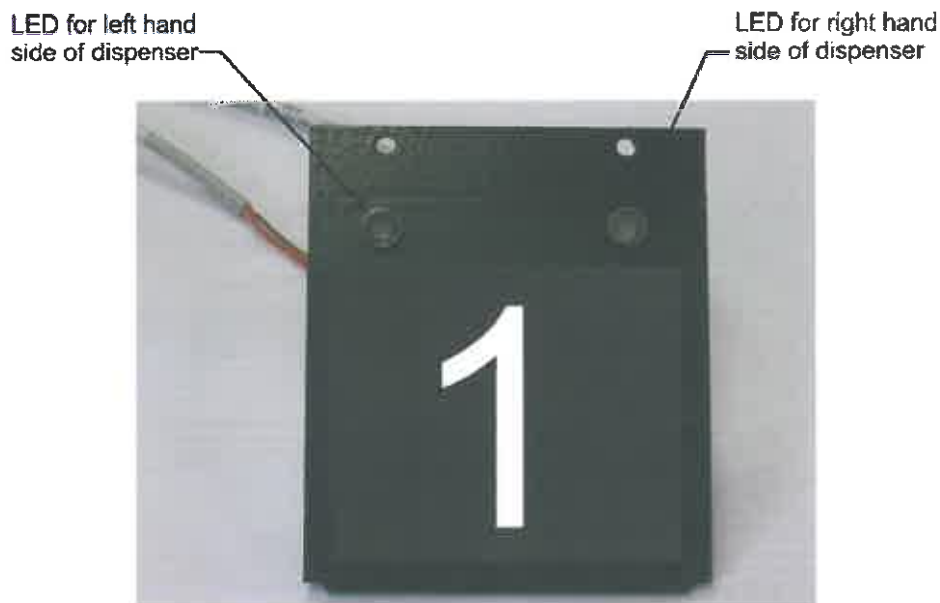
Red - The fault has not been fixed within 7 days and the dispenser has therefore shut down!

The location of the LED indicators will vary depending on the type of dispenser. Details for each of the dispensers may be found on the following pages:

EUROLINE	PAGE 2
ENTERPRISE	PAGE 2
ENCORE 510	PAGE 3
EUROLINE GM	PAGE 3
SK700	PAGE 4

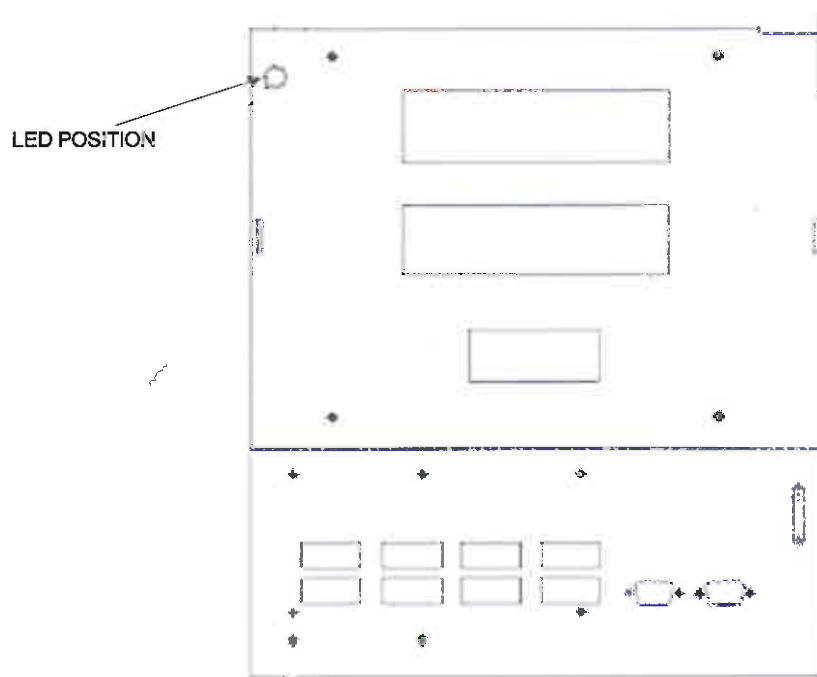
EUROLINE :

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



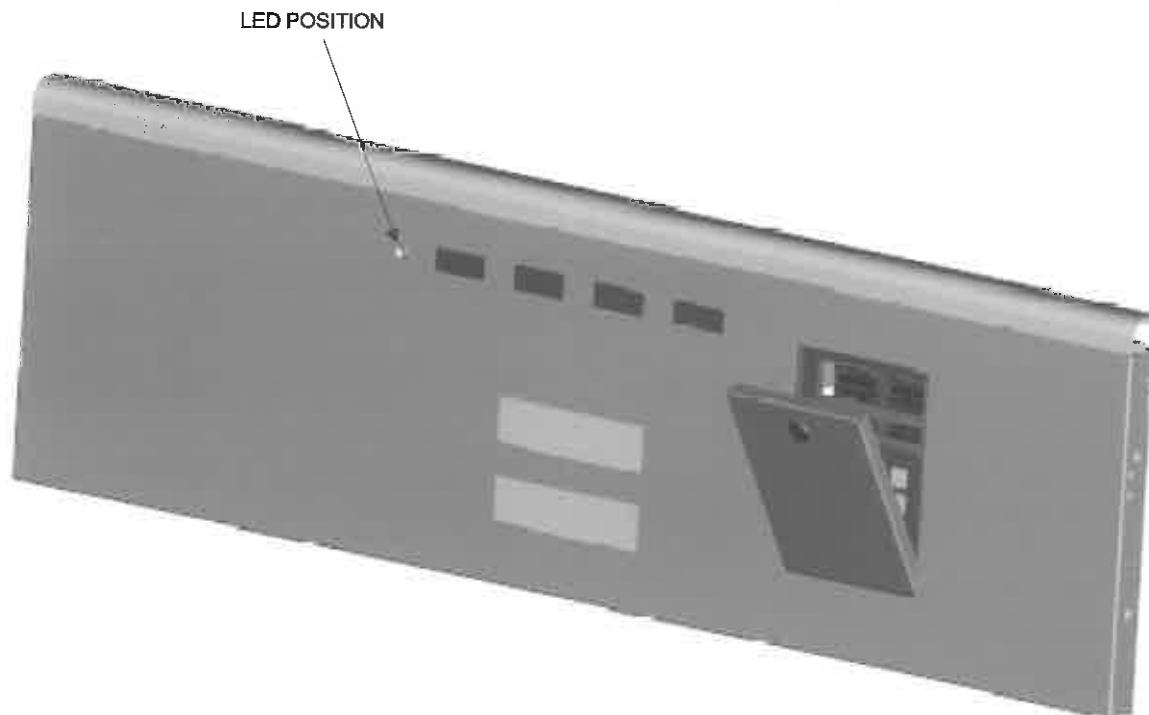
ENTERPRISE:

On the Enterprise, one LED will be found in the top left hand corner of each display bezel.



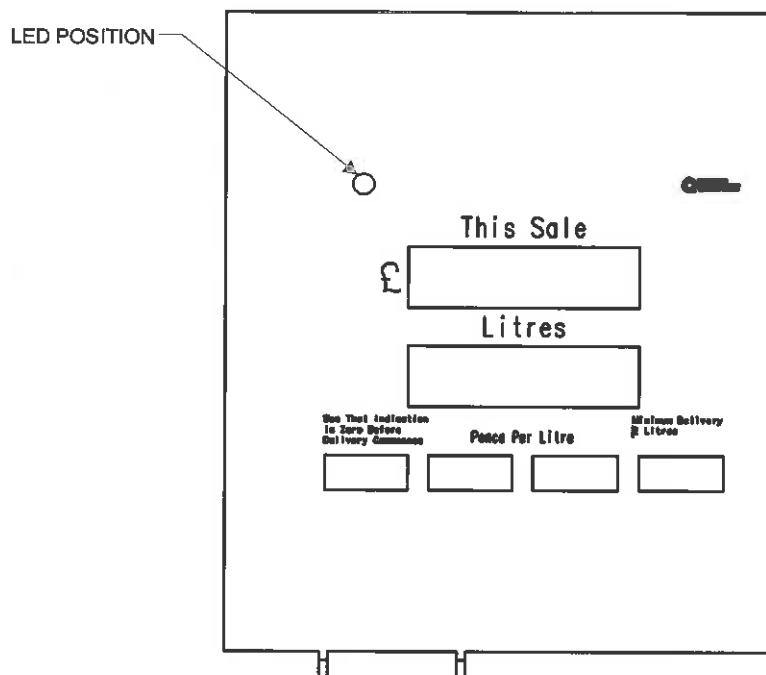
ENCORE 510:

On the Encore 510 there is an LED on each display bezel adjacent to the PPU (Price Per Unit) display/s.



EUROLINE GM:

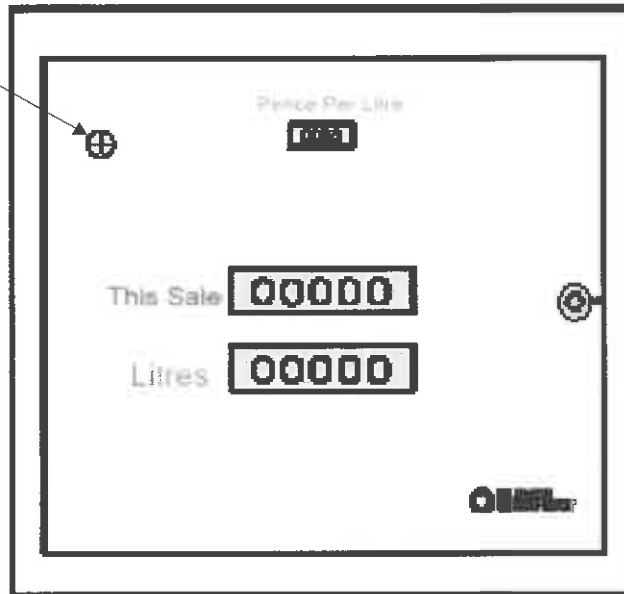
On the Euroline GM, one LED can be found in the top left hand section of each dial face above the 'This Sale' window.



SK700:

On the SK700, one LED can be found in the top left hand section of each dial face, to the left of the 'Pence Per Litre' window.

LED POSITION



Certificate

Pursuant to section 12 of the Weights and Measures Act 1985

Certification No 2650/55

Valid Until 2 July 2016

In accordance with the provisions of section 12 of the Weights and Measures Act 1985, the Secretary of State for Trade and Industry hereby certifies as suitable for use for trade a pattern of a liquid flowmeter, as described in the descriptive annex to this Certificate, and having the following characteristics:-

<i>DISPENSER:</i>	<i>Gilbarco SK700 as described in Certification No 2650</i>
<i>KIOSK CONTROL UNITS AND POINT OF SALE SYSTEMS:</i>	<i>Any approved POS/KCU equipment previously approved with Certification 2650</i>
<i>OUTDOOR PAYMENT TERMINAL:</i>	<i>Any approved Outdoor Payment Terminal equipment previously approved with Certification 2650</i>
<i>BANK NOTE ACCEPTOR:</i>	<i>Any approved Bank Note Acceptor equipment previously approved with Certification 2650</i>
<i>VAPOUR RECOVERY SYSTEM:</i>	<i>With any of the Stage II Vapour Recovery Systems fitted as described in the descriptive annex</i>

Under the provisions of section 12(6) of the said Act, the validity of this certificate is limited as shown above.

Note: This certificate relates to the suitability of the equipment for use for trade only in respect of its metrological characteristics. It does not constitute or imply any guarantee as to the safety of the equipment in use for trade or otherwise.

*Submitted by: Gilbarco Veeder-Root Ltd
Crompton Close
Basildon
Essex
SS14 3BA*

R N Willans
 Signatory: *R N Willans*
 for Chief Executive
 National Weights & Measures Laboratory
 Department of Trade and Industry
 Stanton Avenue
 Teddington
 Middlesex TW11 0JZ
 United Kingdom

Reference No: T1117/0016

Date: 3 July 2006

CONTENTS

CERTIFICATION NO 2650/55

- 1 INTRODUCTION**
- 2 CONSTRUCTION**
- 3 OPERATION**

ILLUSTRATIONS

Figure 1 Typical Vapour Recovery System

Descriptive Annex

1 INTRODUCTION

1.1 General

Stage II Vapour Recovery Systems are used during refuelling to recover the vapour contained within the vehicle fuel tank and are scheduled to become mandatory in the UK by 2010. They are normally required on Petrol grades only, and the recovered vapour is returned to the underground tank. Although the vapour recovery system is not itself a legal metrological requirement, NWML authorisation is required to permit the connection of the various systems described within this descriptive annex to the approved dispenser.

Stage II Vapour Recovery Systems have been in use in other European Countries, notably Germany. The Environmental (non weights and measures) approval of these systems in the UK will be based upon environmental approvals obtained in these other European countries. The systems described herein all have such approvals and are certified accordingly.

1.2 Vapour Recovery Monitoring

As well as the Vapour Recovery system, an optional Vapour Monitor system can be fitted. This checks for the correct operation of the system, and if after a number of consecutive transactions the system is found to be functioning incorrectly an Alarm system is activated. This indicates to the operator or owner of the Dispenser, that the Monitor has detected a fault condition with the Stage II Vapour Recovery System and the system should be serviced or repaired. The alarm can either be local at the Dispenser (Indicating Lamp) or can be remotely located in the kiosk area. If, after a certain period, the Dispenser has not been repaired, the appropriate fuelling position will be automatically disabled until the repair is carried out.

2 CONSTRUCTION

2.1 Components

The systems described typically consist of a mix of standard components described below :-

- | | |
|---------------------------|---|
| a) Vapour Recovery Nozzle | Elaflex ZVA 200 GRV Series
Elaflex ZVA Slimline GRV Series
Alternatively any Vapour Recovery Nozzles
approved for use by TUV |
| b) Vapour Recovery Hose | Elaflex Conti Slimline 21 Series
Alternatively any Vapour Recovery Hoses
approved for use by TUV |
| c) Vapour Pumps | ASF 8014 Series
Durr MEX 0831 Series
Alternatively any Vapour Recovery Pumps |

Any Vapour Recovery system using the components described in Section 2 can be used providing they have a suitable European environmental approval certificate (eg: TUV Certificate).

2.2.2 Vapour Monitor System

The European Environmental approvals certificates normally specify the following –

Type Designation of the System *eg: Gilbarco VMC (Vapour Monitoring Controller)*

Manufacturer *eg: Gilbarco GmbH & Co. KG
Ferdinand-Henze-Str. 9
33154 Salzkotten*

System Gas Flow Meter *eg: Gilbarco Veeder-Root GE1 Meter.*

Any of the monitoring components described in Section 2 can be used providing they have an environmental approval certificate for such a Vapour Monitor System (eg: TUV Certificate) which lists the appropriate Monitoring component.

3 OPERATION

3.1 When fuelling commences, the fuel delivered displaces the vapour contained within the vehicle fuel tank and the vapour is therefore forced out. The vapour pump is used to collect the vapour as it emerges from the fuel tank. Referring to Figure 1, the path of the vapour flow is –

Via the outer ring of the nozzle >
On into the inner core of the coaxial hose >
Into the splitter hose connector (ZAF) >
Out of the splitter hose connector into the vapour pipe >
Through the vapour monitor meter (if fitted) >
Through the proportional valve >
Through the Vapour Pump >

Then out through the shear valve and back to the underground tank

3.2 The Vapour Recovery Controller Electronics is used to match the recovered vapour rate with the fuel flow rate. It does this by adjusting the proportional valve to obtain the vapour flow rate in line with the fuel flow as indicated by the fuel meter pulser. This way, the vapour recovery volumetric efficiency is kept within the 95 to 105% level.

3.3 The Vapour Recovery Controller Electronics is calibrated using an external Gasmeter connected to a handheld terminal. The handheld terminal interfaces to the Vapour Recovery Electronics by a serial port and initiates a calibration sequence. This is accomplished without any fuel delivery and with only air being measured, also with a calibration factor being used which makes allowance for the difference between air and vapour and the particulars of the system components used.

3.4 An optional Vapour Monitoring System may also be used. This is used to check the correct operation of the Vapour Recovery system. A Vapour meter is used to measure the vapour being recovered. This interfaces to the Vapour Monitor Electronics, which compares this with the fuel delivered and, if after a number of consecutive transactions the vapour recovered is outside of specification, the monitor will indicate an alarm. This gives the owner time to have the system repaired before the Fuelling point is automatically shut down.

3.5 If a Vapour Monitoring system is not used, the recovery system will need to be checked for correct operation on a regular basis.

3.6 The Monitor Alarm can be either indicated at the Dispenser (eg: via an LED) or a signal can be sent to the Kiosk via the standard data communication line to the POS and indicated at the POS itself. Optionally, a special 'Kiosk Alarm Indicator' (KAI) can be fitted which interfaces to the Monitor system via a serial channel and indicates the alarm details in the kiosk.

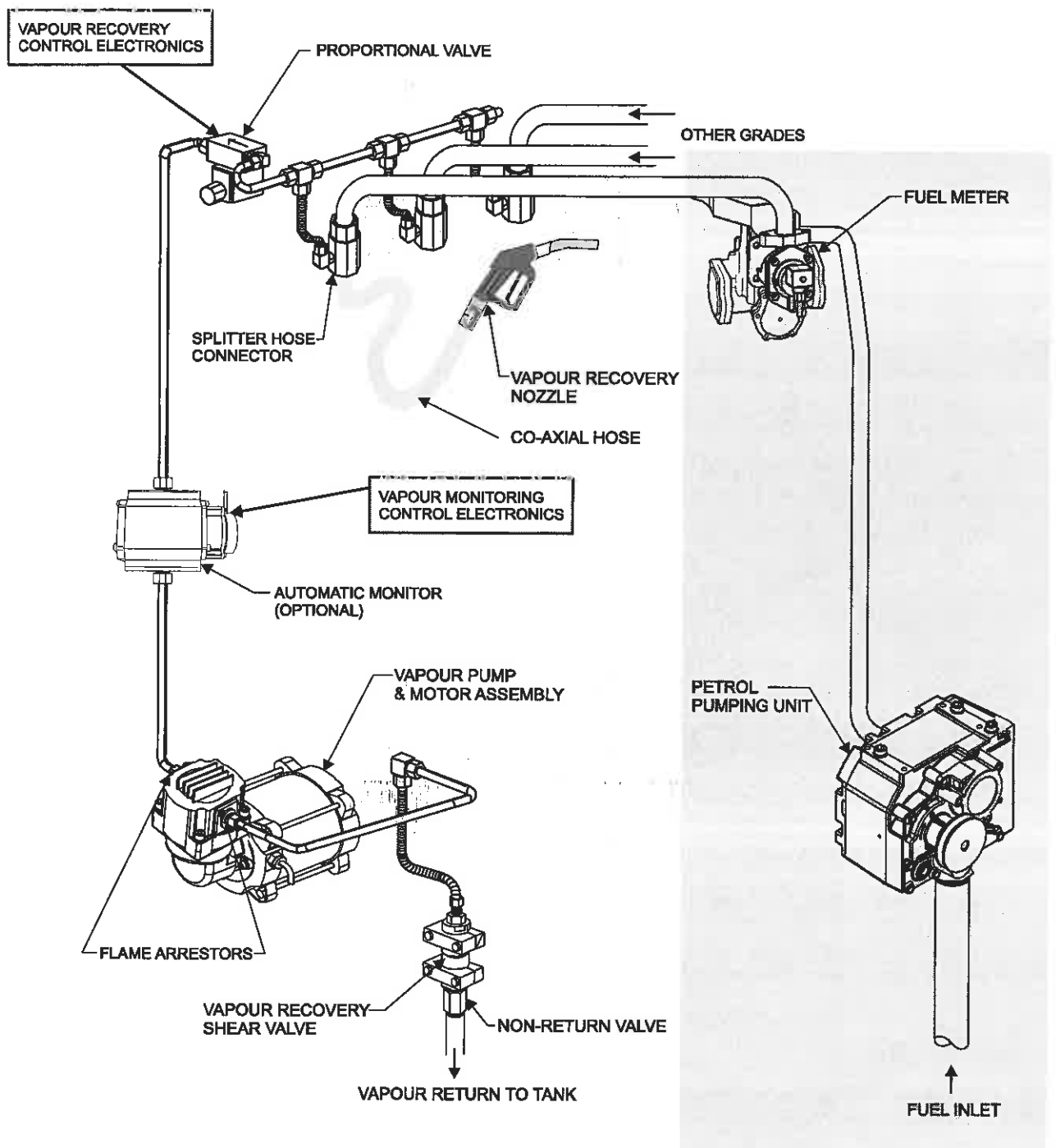


Figure 1 Typical Vapour Recovery System
 (Non Vapour Recovery components shown within greyed area)



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 Überwa-
chungssysteme 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 vapour 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.

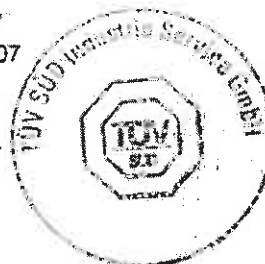
The required minimum efficiency ratio of 85% was proved.

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

On-Site Sign-off Document



- All Clearance Certificates and associated H&S documents completed
- Work completed using correct H&S procedures at all times
- All Dispensers retrofitted with Stage II VR components
- All equipment tested and certified
- Appropriate PPE worn at all times
- Site left operational and fully Stage II VR compliant

Date: _____

Signed
(Lead Engineer) _____

Signed
(Site Manager) _____

Shell Whiteles
Norwich Rd

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:

Insert local authority address

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

Shell Whitehouse

A1.2. Please give the address of the premises

665-667 Norwich Road, Ipswich, Suffolk

Postcode: **IP1 6JZ**

Telephone: **01473 238950**

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

LAPPC PERMIT REG NO 1.2/RJD/13

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

SHELL UK LIMITED

Trading/business name (if different)

.....

Registered Office address

**Shell Centre,
York Road,
London**

Postcode: **SE1 7NA** Telephone: **0207 934 1234**

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: **SHELL TRANSPORT AND TRADING COMPANY PLC**

Ultimate holding company registered office address

**SHELL CENTRE
YORK ROAD
LONDON**

Postcode: **.SE1 7NA** Telephone: **0207 934 1234**

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: **Kerry Toms**

Position: **Retailer Contracting Assistant**

Address:

**P O Box 403
Staines
Middlesex**

Postcode: **TW18 3ZB** Telephone: **0845 309 3091**

Fax number: **01784 897 845** email address: **kerry.toms@shell.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) 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?

See Attached

Doc Reference See attached

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

See Attached

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

Doc Reference: **See Attached**

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

.....
.....
.....

Doc Reference: **See Attached**

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: **See Attached**

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: **See Attached**

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: **See Attached**

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: **See Attached**

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: **See Attached**

C1. Fees and Charges

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

£.....

Cheques should be made payable to:

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.

Shell Shared Service Centre Glasgow Ltd
P O Box 25071
72 Gordon Street
Glasgow

Postcode G1 3WR Telephone.

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?

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/ 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: **Kerry Toms**

Position: **Retailer Contracting Assistant**

Date: **7TH July 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.

For the application from:

Premises name: **Shell Whitehouse**

Signature 

Name: **Kerry Toms**

Position: **Retailer Contracting Assistant**

Date: **7th July 2009**

Signature

Name

Position.....

Date

** 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 - STAGE 1B- Emergency Action Plan

All service stations have now been fitted with a vapour recovery system known as Stage 1B.

Stage 1B prevents vapours being discharged into the atmosphere during a tanker delivery by routing the vapours back to the tanker where they are collected and taken back to the terminal.

This process requires a permit (Similar to your Petroleum Licence).

Part of the permit requirement is that you have an emergency action plan in place should a leak occur in the vapour recovery system during a delivery. Whilst this situation is unlikely to be dangerous, it may cause some nuisance to your neighbours, therefore please carry out the following actions.

1. Ensure the driver stops the delivery.
2. Inform Retailer Maintenance Support on **0800 731 5555** so that the correct contractor can be sent to site to fix the problem.
3. Contact the Retailer Call Centre on **0800 731 5555** to record the incident.
4. Cancel further deliveries until the leak has been fixed.
5. Inform your local Environmental Protection Officer, name and telephone number should be on the permit.
6. Record the incident in your log sheet Incidents of vapour leak or vapour lock.

If you have any questions about this procedure please contact the HSSE Manager - don't wait until you have a problem.

VAPOUR RECOVERY - STAGE 2- Operation and Records

All service stations are now being fitted with a vapour recovery system known as Stage 2.

Stage 2 prevents vapours being discharged into the atmosphere during the filling of the vehicle fuel tank by routing the vapours back to the underground tank from where they are transferred to the tanker during a fuel delivery and taken back to the terminal.

This process requires a Permit (Similar to your Petroleum Licence).

The vapour recovery system has the benefit of automatic monitoring. Each pump has a LED display that should be checked on a daily basis.

1. In normal operation the LED is GREEN
2. In the event that insufficient vapour is being collect by the vapour recovery system the LED will change to orange, and an alert will be printed on the end of day and end of shift reports
3. Contact the Retailer Call Centre on **0800 731 5555** to report the incident and request that the contractor attend the site to resolve the issue.
4. If the fault is not fixed within 7 days the pump will automatically stop operating and no more fuel can be dispensed from that pump until a contractor has attended and fixed the problem.
5. Record the incident in your log sheet Incidents of vapour leak or vapour lock.

If you have any questions about this procedure please contact the HSSE Manager - don't wait until you have a problem.

The Retailer should ensure that at all times the following are available for inspection:-

1. A copy of the permit
2. The log book
3. Staff training records
4. Plan of the site and site pipe work
5. Copy of the compliance/ testing certificate

VAPOUR RECOVERY – Staff Training

All staff should be trained on the operation of the vapour Recovery system and provided with refresher training once every 12 months.

Training should include the following items:-

- a. Basic principles of vapour balancing related to the type of VR System.
- b. The safety precautions to be followed before, during and after a delivery to ensure that the system functions correctly so there is no spillage of petrol should there be an equipment failure.
- c. Their statutory obligations not to permit the delivery to commence until the vapour balance hose has been properly connected by the driver.
- d. The reasons for and the correct sequence in which the vapour balance hose should be connected.
- e. The signs and symptoms of vapour leaks.
- f. Monitoring the delivery for vapour leaks and the reporting/recording procedure of instances of vapour lock, vapour leak, equipment failures, or unusually slow deliveries.
- g. The precautions to be taken should there be a malfunction of the equipment which over-pressurises the system.

SPECIMEN APPLICATION FOR AUTHORISATION

The following is a specimen application form which has been the subject of consultation with industry representatives and members of the former IPLA (Her Majesty's Inspectorate of Pollution/Local Authority Enforcement Liaison) Committee. Given the consistent nature of service station operations, it is likely to be more efficient for both industry and local enforcing authorities to make use of this form in all cases.

In accordance with the Environmental Protection (Prescribed Processes & Substances Etc) (Amendment) (Petrol Vapour Recovery) Regulations 1995, SI 2678, applications may not be made more than 15 months before the date on which authorisation is required. (See Clause 9). Operators are strongly advised to submit their applications no later than 9 months before the relevant date in order to allow local authorities sufficient time to determine the application. Operation without an authorisation after the relevant date would be an offence.

References to the term "process" are references to the unloading into storage of petrol. The operator of the process under the terms of the Act is most likely to be the person with management responsibility for the procedures on site. This does not, however, absolve other people of their responsibilities (for instance of drivers in the case of following unloading procedures or of the equipment owners in the case of installation of equipment) since action can be taken directly under section 158 of the Act.

Further advice on transfer of authorisations and on process changes may be found in General Guidance Note GG1—"Introduction to Part I of the Act"; ISBN 0 11 752423 9, published by HMSO, £5 net.

**Application for Authorisation; Part I,
Environmental Protection Act, 1990**

Section A: General Information

1. Name and address of premises where process is/will be carried out

SHELL WHITE HOUSE (675) 665, NORWICH ROAD,
IPSWICH SUFFOLK Post Code IP1 6TZ
Telephone No. 01473 Contact Name ZARA BEHBEHANI
238 950
Position CURRENT SITE
MANAGER.

2. Name and address of applicant[s]

SHELL U.K. LIMITED
MERCURY HOUSE
HANGER GREEN
EALING
LONDON W5 3BA

Telephone No 0181 758-7819 Contact Name JAMES FLYNN
Position LOCAL AUTHORITY LIAISON

3. Name and address of registered office (if applicable) In the case of partnerships, names and home addresses of the partners.

SHELL UK LTD.
SHELL MEX HOUSE
THE STRAND
LONDON, WC2R 0DX

Telephone No 0171 257-3000 Contact Name N/A
Position N/A

4. Name of the ultimate holding company (if applicable)

N/A

5. Address for correspondence if different from (1) above

SHELL U.K. LIMITED
MERCURY HOUSE
HANGER GREEN
EALING
LONDON W5 3BA

6. Enclose a map/plan with the application showing the location where the process is/will be carried out. Where the process is/will be carried out on only part of the premises please indicate the exact location on the plan enclosed.

7. Is the service station located under permanent living quarters or working areas? See Clause 9

YES NO

8. When was vapour balancing equipment installed or when will it be installed?

INSTALLED BETWEEN 1996 / 1997

Section B. Process and Control Information

9. Volume of petrol unloaded into the service station in each of the last three calendar years (see Clause 9 of this Note for the relevant timescales); in cubic metres (ie litres divided by 1000). Circle the appropriate band

YEAR	VOLUME OF PETROL/m ³			
1997	<100	100-500	501-1000	>1000
1996	<100	100-500	501-1000	>1000
1995	<100	100-500	501-1000	>1000

10. Are deliveries "Driver Controlled"

YES	NO
-----	----

11. At a maximum, how many tanker compartments discharge into storage tanks at any one time, or will do so once a vapour balancing system is in place. If the latter information is not known, a statement of what assessment will be made to determine this information and within what timescale. The information supplied under item 11 should be supplemented by a site specific assessment. (See Clause 17).

UP TO THREE (03)

12. Measures taken or to be taken for vapour emission control, both during unloading and in storage

TANK VENTING SYSTEM HAS MANIFOLD STAGE 1B VAPOUR BALANCING SYSTEM INSTALLED.

13. Please attach process diagrams and plans of vapour balancing equipment (including height and location of tank vent pipes)

SEE ATTACHED PLAN

14. Unloading procedure and instructions (please attach)

SEE ATTACHED PACK.

15. Details of Supervision, Training and Qualifications of Operating Staff [Details should be specific to on-site staff and include general statements concerning delivery drivers]

SEE ATTACHED PACK

16. Schedule of maintenance of vapour balancing controls [please attach]

SEE ATTACHED PACK

17. Schedule of examination and testing for vapour balancing controls [please attach]

SEE ATTACHED PACK

18. Procedures or contingency measures in the event of vapour containment equipment failure. [please attach]

SEE ATTACHED PACK

You may also supply any other information you wish the Local Authority to take into account when considering your application.

I hereby certify that I am authorised to sign to sign this application and all the information contained in this application is correct to the best of my knowledge and belief.

Name (BLOCK CAPITALS): JAMES FLYNN

Signature: James Flynn Date: FRI 16TH OCT '9

Designation: LOCAL AUTHORITY LIAISON IPSWICH

Fee attached (cheques payable to the BOROUGH Council) £ 100 - 00