

Process Guidance Note NIPG 1/14 (Version 3)

Unloading of Petrol into Storage at Petrol Stations

ENVIRONMENT (NI) ORDER 2002
POLLUTION PREVENTION AND CONTROL REGULATIONS (NI) 2003
INDUSTRIAL POLLUTION CONTROL (NI) ORDER 1997
IPC (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS (NI) 1998

GUIDANCE FOR PROCESSES PRESCRIBED FOR
AIR POLLUTION CONTROL
AND
AIR POLLUTION PREVENTION AND CONTROL
BY DISTRICT COUNCILS

The Department would like to acknowledge the work of the Environment Agency's Local Authority Unit in the drafting of this guidance note.



**ENVIRONMENT
AGENCY**

1 Introduction

- 1.1 This note is issued by Department of the Environment to give guidance on the conditions appropriate for the control of emissions into the air from unloading of petrol into storage, and from filling of vehicle petrol tanks, at service stations. It supersedes guidance note NIPG1/14 (Version 2) that issued in November 2004.
- 1.2 This is one of a series of notes giving guidance on Best Available Techniques (BAT)¹. The notes are all aimed at providing a strong framework for consistent and transparent regulation of installations.
- 1.3 This note is for use under the Local Air Pollution Prevention and Control (LAPPC) regime established by the Environment (NI) Order 2002². It constitutes statutory guidance to regulators under regulation 38 of The Pollution Prevention and Control Regulations (NI) 2003. The note will be treated as one of the material considerations when determining any appeals made against a decision under the 2002 Order.
- 1.4 The note also (where appropriate) gives details of any mandatory requirements affecting air emissions which are in force at the time of publication, such as those contained in Directions from the Department.
- 1.5 In this note, guidance is provided in relation to controls on emissions into the air from two parts of the activity:
- The unloading of petrol into stationary storage tanks at a service station. These are referred to herein as “Stage I” controls; and
 - Filling of vehicle petrol tanks. These are referred to as “Stage II” controls.
- The provisions of this note in relation to Stage II controls derive from the Pollution Prevention and Control (Amendment) Regulations (NI) 2007.
- 1.6 All installations are subject to BAT. In general terms, what is BAT for one installation in a sector is likely to be BAT for a comparable installation; but in each case it is, in practice, for regulators (subject to appeal) to decide what is BAT for the individual installations and the regulator should take into account variable factors (such as configuration, size and other individual characteristics of the installation) and the locality (such as proximity of particularly sensitive receptors³). Ultimately, therefore, what constitutes BAT is site specific but this guidance note comprises guidance for the generality of installations in the sector and careful regard should be had to it, in order to maximise consistency of permits as appropriate.
- 1.7 This guidance is for:
- regulators: who must have regard to the guidance when determining applications and reviewing extant authorisations and permits
 - operators: who are best advised also to have regard to it when making applications, and in the subsequent operation of their installation
 - members of the public: who may be interested to know what the Government considers (in accordance with the legislation) amounts to appropriate conditions for controlling air emissions for the generality of installations in this particular industry sector
- 1.8 The guidance is based on the state of knowledge and understanding at the time of writing of:
- storage and unloading of petrol into storage at service stations
 - filling of vehicle petrol tanks
 - the potential impact on the environment of the above activities; and
 - what constitutes BAT for preventing and reducing air emissions
- 1.9 The note may be amended from time to time in order to keep abreast with developments in BAT including improvements in techniques and new understanding of environmental impacts and risks. Such changes may be issued in a complete revision of this document, or in separate additional guidance notes which address specific issues. (It may not always be possible to issue amending guidance quickly enough to keep in absolute step with rapid changes, which is another circumstance where paragraph 1.6 above might apply.)
- 1.10 Steps will be taken to ensure that those who need to know about changes are informed. Operators (and their advisers) are, however, strongly advised to check with the regulator whether

¹ BAT is the term used under the Pollution Prevention and Control regime.

² In accordance with Part 2 of Schedule 3 to the PPC Regulations (NI) 2003, storage and unloading of petrol into storage at service stations transfer from regulation under the 1997 Order to the 2002 Order from 1 April 2004.

³ Guidance on the relationship between BAT and air quality objectives is contained in the General Guidance Manual on policy and procedures for A2 and B installations.

there have been any changes before relying on this note for the purposes of making an application under the 1999 Act or making any other decisions where BAT may be a consideration.

- 1.11 This note has been produced in consultation with relevant trade bodies and representatives of regulators including members of the Industrial Pollution Liaison Committee and the NI Industrial Pollution Liaison Group.
- 1.12 Printed copies of this and other PG notes are available, free of charge, via the Department at www.doeni.gov.uk/epd.
- 1.13 General guidance explaining LAPPC and setting out the policy and procedures, is contained in the "General Guidance Manual on Policy and Procedures for Part C Installations" available from www.doeni.gov.uk/epd, referred to in this document as the "General Guidance Manual." See Ref. (a). This is designed for operators and members of the public, as well as for district council LAPPC regulators.

2 Timetable for compliance and reviews

Existing installations or activities - Stage I Controls

- 2.1 Throughout this note, references are made to provisions relating to Stage I and Stage II controls separately, as described in paragraph 1.5.
- 2.2 Upgrading of installations to comply with paragraphs 5.1, 5.2 and 5.3 should have been completed by 31 December 2004
- NB. Nothing in this note applies to installations exempted from the Regulations, see paragraph 3.2.
- 2.3 The authorisation for an existing process should contain conditions which have regard to the guidance contained in this note. The application for a permit should contain all proposals for upgrading, (if necessary), there should be no separate "upgrading submission" stage. **Section 9**, **Section 10** and **Section 11** provide a specimen application and permit.

Existing installations or activities - Stage II Controls

- 2.4 In accordance with the Pollution Prevention and Control (Amendment) Regulations (NI) 2007, upgrading according to paragraphs 5.13 - 5.25 must be completed no later than 1 January 2010 for existing petrol stations if the throughput of petrol unloaded at a service station is greater than 3500m³ per year.

Existing installations or activities - General Requirements

- 2.5 The provisions of this note and the dates by which compliance with these provisions is expected are listed in the table below, together with the paragraph number where the provision is to be found. Compliance with the provisions should normally be achieved by the dates shown. Authorisations/permits should be varied as necessary, having regard to the changes and the timetable.

Table 1: Compliance timetable

Provision	Relevant paragraph/ row in this note	Compliance date
Environmental management System	Paragraphs 6.34 - 6.35	To be complied with as soon as practicable, which in most cases should be before November 2005 (NIPG Note 1/14 (Version 2))
Stage II Vapour Recovery	Paragraphs 5.13 - 5.25	1 January 2010.
And any other provision of this guidance		To be complied with as soon as practicable, which in most cases should be before November 2005 (NIPG Note 1/14 (Version 2))

- 2.6 Replacement plant should normally be designed to meet the appropriate standards specified for new installations or activities.
- 2.7 Where provisions in the preceding guidance note have been deleted or relaxed, authorisations should be varied as necessary as soon as reasonably practicable. **Section 7** provides a summary of all changes.

New installations or activities - Stage I Controls

- 2.8 *New service stations.* All new service stations except those referred to in paragraph 3.2 must be designed and operated in accordance with paragraphs 5.1, 5.2 and 5.3. (For Definitions See **Section 8**)

New installations or activities - Stage II Controls

- 2.9 *New service stations.* From 1ST January 2010, all new service stations, except those referred to in Section 3.20, should be designed and operated in accordance with paragraphs 5.13 - 5.25.

Substantially changed installations or activities

- 2.10 For substantially changed installations or activities, the permit should normally have regard to the full standards of this guidance with respect to the parts of the installation that have been substantially changed and any part of the installation affected by the change, from the first day of operation.

Permit reviews

- 2.11 Under LAPPC the legislation requires permits to be reviewed periodically but does not specify a frequency. It is considered for this sector that a frequency of once every six years ought normally to be sufficient for the purposes of Regulation 15(1) of the Pollution Prevention and Control Regulations (NI) 2003.

More frequent review may be necessary in individual cases for the reasons given in Regulation 15(2). Further guidance on permit reviews is contained in the General Guidance Manual.

- 2.12 Conditions should be reviewed where complaint is attributable to the operation of the installation and is, in the opinion of the regulator, justified.

3 Process description

Stage I Controls

- 3.1 Unloading of petrol into storage at service stations is, with certain exceptions (see paragraph **3.2**) prescribed for Local Air Pollution Prevention and Control, LAPPC, under section 1.2 Part C of Schedule 1 of the Pollution Prevention and Control Regulations (NI) 2003. (See **Appendix 1**)
- 3.2 By virtue of the Pollution Prevention and Control Regulations (NI) 2003, nothing in this note applies to service stations where the throughput of petrol unloaded at a service station is not likely to exceed 500m³ in any 12 month period.
- 3.3 It should be noted that the constructional standards for mobile containers are provided for in the Carriage of Dangerous Goods by Road Regulations (NI) 1997. Permits issued by district councils under LAPPC therefore should not contain conditions relating to constructional standards of mobile containers. At the time of revising this guidance note, consultation is taking place on an amendment to those conditions and regulations. This includes a partial substitution by an Approved Code of Practice.
- 3.4 Paragraphs **2.2**, **2.8**, **3.7**, **5.1**, **5.2** and **5.3** of this note are mandatory as these conditions are required to meet the obligations of the EC Directive 94/ 63/EC on the Control of Volatile Organic Compound (VOC) Emissions Resulting From the Storage of Petrol and its Distribution from Terminals to Service Stations..
- 3.5 This guidance uses the words "shall" and "must" when describing requirements of Directive 94/63/EC and the word "should" when giving guidance.
- 3.6 The remainder of **Section 5** and **Section 6** detail measures which are supplementary to paragraphs **5.1**, **5.2** and **5.3** in that, whilst not requirements of the Directive as such, they form the basis of ensuring that "arrangements are in place and properly functioning".
- 3.7 This guidance NIPG 1/14 (Version 3) was written so as to comply with Directive 94/63/EC (paragraph **3.3**) and the UN ECE VOCs Protocol (paragraph **3.19**).
- 3.8 The Regulations mentioned in paragraph **3.1** provide that the Petroleum Licensing Authority (PLA) must be notified of an application for authorisation of a service station. The Petroleum Licensing Authority is the local authority empowered to grant petroleum spirit licences under the Petroleum (Consolidation) (NI) Order 1929.
- 3.9 Petroleum Licensing Authorities also exercise controls over service station equipment design, construction and operation. Regulators are advised to consult closely with PLAs in order to ensure compatibility of requirements.
- 3.10 As a minimum, PLA's should be given the opportunity to comment on draft authorisation conditions and on draft variation notices. It is also desirable that there is liaison over possible enforcement action. Regulators should also consider the potential for joint inspections, as a means of ensuring consistency between regimes and reducing the burden on operators of installations.
- 3.11 Guidance is also available to PLA's. The guidance in this process guidance note should be read in conjunction with the guidance to PLA's. (See Ref. **(g)** - **(k)**).
- 3.12 Exclusions from either the need for a permit, or the scope of permits are given in paragraphs **3.2** - **3.4** above.
- 3.13 This note relates to the prescribed activity of unloading into storage of petrol at service stations from mobile containers. The term "mobile container" is taken from the EC Directive mentioned in paragraph **3.3**, but in the context of this note means "road tanker". The description of prescribed service stations are set out in the Pollution Prevention and Control Regulations (NI) 2003 as amended), which are reproduced in **Appendix 1**.
- 3.14 The permit should cover emissions from unloading and from storage of petrol, because they are part of the same installation.
- 3.15 The unloading of petrol into the tanks may be either directly from the road tanker or via an off-set filling pipe. (See Ref. **(g)**)
- 3.16 Deliveries of petrol can occur at any time and may occur outside normal operating hours. The deliveries are directly supervised by a service station operator or controlled entirely by the road

tanker driver. In the Approved Code of Practice and Guidance on Unloading Petrol from Road Tankers (L133), reference is made to unloading “where the tanker driver is assisted” and “where the tanker driver is unassisted”.

- 3.17 There are emissions associated with the escape of petrol vapour displaced when storage tanks are filled, and with breathing or ventilating losses from the storage tank.
- 3.18 It should be noted that the term "service station", which is defined in **Section 8** includes commercial refilling sites such as may be found on Post Office or Ministry of Defence premises or other industrial sites where petrol is dispensed into motor vehicles in addition to retail outlets.

Stage II Controls

- 3.19 There are also petrol vapour emissions associated with the filling of vehicle petrol tanks at service stations. Controls for abating such emissions are termed “Stage II controls”. Under the 1991 United Nations Economic Commission for Europe Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes (referred to herein as the UN ECE VOCs Protocol), the United Kingdom is obliged to introduce controls to ensure that such emissions are recovered. This obligation has been given effect by Pollution Prevention and Control (Amendment) Regulations (NI) 2007.
- 3.20 In relation to provisions for Stage II controls, this note does not apply to existing service stations where the throughput of petrol does not exceed 3500m³ in any 12 month period. For new service stations, this note does not apply where the throughput of petrol is not likely to exceed 500m³ in any 12-month period.

4 Potential releases

- 4.1 The key emissions from these installations that constitute pollution for the purposes of the Pollution Prevention and Control Regulations (NI) 2003 and therefore warrant control are those consisting of petrol vapours which include benzene (petrol contains less than 1% benzene).
- 4.2 The following parts of the installation may give rise to petrol vapours:
- Unloading petrol from road tankers
 - Storage of petrol
 - Filling of vehicle petrol tanks

5 Emission limits, monitoring and other provisions

Stage I Controls

- 5.1 The EC Directive 94/63/EC gives discretion to Member States to adopt different measures to those in paragraph 5.3 if they are demonstrated to have at least the same efficiency. Any such alternative measures would need to be approved by the Department of the Environment.
- 5.2 The provisions of paragraph **5.3** are designed to reduce the total annual loss of petrol resulting from unloading into storage installations in service stations to below a target reference value (see **Section 8**) of 0.01% by weight of the throughput.
- 5.3 Vapours displaced by the delivery of petrol into storage installations at service stations must be returned through a vapour tight connection line to the road tanker delivering the petrol. Unloading operations may not take place unless the arrangements are in place and properly functioning, subject to paragraph **6.6**.
- 5.4 The vapour tight connection line should be taken to include the hoses and connectors used to return vapour to the road tanker, but not the vent mentioned in paragraph **6.6**.
- 5.5 Petrol delivery and vapour return lines should be tested prior to operation and periodically for vapour containment integrity
- 5.6 Pressure vacuum relief valves or other similar devices on fixed tank vents should be checked for correct functioning, including checking for extraneous matter, correct seating and the presence of corrosion at least once every three years.
- 5.7 The operators should maintain a log book at the permitted installation incorporating details of all maintenance (see paragraph **6.39**), examination and testing, inventory checking, installation and repair work carried out, along with details of training given to operating staff at the service station. The register required to be kept by the Petroleum Licensing Authority should suffice for this purpose.
- 5.8 A competent person should remain near the tanker during unloading. A competent person is one who has received training for deliveries in accordance with paragraphs **6.13-6.21**, **6.36** and **6.38**. Delivery drivers may be trained as the competent person. Specific responsibilities of the site operator and the tanker driver are set out in the Approved Code of Practice and Guidance on Unloading Petrol from Road Tankers (L133), including responsibilities for preventing a fire through preventing the overfilling of the storage tank; controlling sources of ignition during unloading and dealing with any spillages that may occur during the unloading of a petrol tanker; and preventing falls from petrol tankers.
- 5.9 The log book should also detail any suspected vapour leaks together with action taken to deal with any leak, in accordance with paragraphs **5.10** and **5.11**.
- 5.10 All reasonably practicable steps should be taken to prevent uncontrolled leaks (meaning any leak excepting those which occur through the vent mentioned in paragraph **6.6** during potentially hazardous pressurisation) of vapour from vents, pipes and connectors from occurring.
- 5.11 The regulator should be advised without delay of the circumstances of such a vapour leak if there is likely to be an effect on the local community, and in all cases such a vapour leak should be recorded in the log book required under paragraph **5.7**. The operator should advise the regulator of the corrective measures to be taken and the timescales over which they will be implemented. Acceptable time scales are likely to depend on the nature of work to be undertaken, for instance a sticking pressure vacuum relief valve is likely to be quicker to rectify than a damaged vapour connector.
- 5.12 Instances of vapour lock should also be recorded in the log book and, where appropriate, the regulator should be informed. If this is a persistent occurrence the operator should advise the regulator of the corrective measures proposed and the time scales over which they will be implemented.

Stage II Controls

- 5.13 Filling of vehicle petrol tanks at service stations with a throughput of more than 3500m³ of petrol per year for existing service stations or 500m³ of petrol per year for new service stations is a prescribed activity under the Pollution Prevention and Control (Amendment) Regulations (NI)

2007. Regulators should include conditions in permits granted to operators of such service stations to ensure that equipment is designed and operated in accordance with paragraph **5.15**.
- 5.14 The provisions of paragraph **5.15** are designed to ensure recovery of at least 85% of the displaced petrol vapours resulting from filling of vehicle petrol tanks in service stations.
- 5.15 Vapours displaced by the filling of petrol into vehicle petrol tanks at service stations should be recovered through a vapour recovery system to a storage installation, which should include the service station's underground storage tank or other appropriate vessel. Filling of vehicle petrol tanks should not take place unless such a vapour recovery system is in place and fully functioning.
- 5.16 The vapour recovery system referred to in paragraph **5.15** should be approved for use under the regulatory regime of at least one European Union or European Free Trade Association country ("type approval"). A certificate to confirm such compliance should be retained at the petrol station with the log book. The vapour recovery system should be certified by the manufacturer to have a hydrocarbon capture efficiency of not less than 85% (as defined in Section **8**), determined through the aforementioned type approval test.
- 5.17 All vapour recovery equipment used should be designed, installed and tested in accordance with the relevant British, European and international standards or national methods in place at the time that the equipment was installed. Standards are being developed in several member states (for example in Germany VDI 4205 and Merkblatt 1) and, at the time of drafting this note, it is understood that standards for testing specific to the United Kingdom will be developed in the near future.
- 5.18 Petrol delivery and vapour recovery systems for vehicle petrol tanks should be tested in accordance with the manufacturer's specifications prior to commissioning and for:
- Vapour containment integrity at least once every three years, 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
 - Effectiveness of the vapour recovery system at least once every three years. For open active systems (paragraphs **6.24** to **6.26**), this should be undertaken by measuring the ratio of the volume of vapour recovered to liquid petrol dispensed i.e. vapour/petrol ratio (V/P). The V/P ratio should be at least 95% and, where the vapours are recovered into the fuel storage tank, not greater than 105% to avoid excessive pressure build up and consequent release through the pressure relief valves. The V/P ratio should be determined by simulating the dispensing of petrol using measuring equipment approved for use in any European Union or European Free Trade Association country. The method to be used should involve measuring the volume of air recovered with fuel flow simulated at the dispenser and read electronically using the approved measuring equipment. This provides the ratio of air recovered to liquid dispensed (air/liquid ratio) which should then be corrected to provide the V/P ratio using an appropriate factor to account for the difference in viscosity between petrol vapour and air ('k-factor').
 - For other systems, the effectiveness of the vapour recovery system should be tested for effectiveness in accordance with the manufacturer's specification with details of this testing retained with the service station log book.
- 5.19 Operators should install an automatic monitoring system (see paragraph 5.20) or ensure a greater frequency of other regular testing (see paragraph 5.21).
- 5.20 An automatic monitoring system according to paragraph 5.19 should:
- Automatically detect faults in the proper functioning of the petrol vapour recovery system including the automatic monitoring system itself and indicate faults to the operator. A fault should be deemed to be present where continuous monitoring during filling of vehicle petrol tanks indicates that the V/P ratio averaged over the duration of filling has fallen below 85% or has exceeded 115% for ten consecutive filling operations. This only applies to filling operations of at least 20 seconds duration and where the rate of petrol dispensed reaches at least 25 litres per minute.
 - Automatically cut off the flow of fuel on the faulty delivery system if the fault is not rectified within 1 week.
 - Be approved for use under the regulatory regime of at least one European Union or European Free Trade Association country.
- 5.21 Where an automatic monitoring system is not used, the operator should ensure an increased level of manual monitoring is undertaken after commissioning. The frequency of monitoring should be in accordance with Table 2.

Table 2: Frequency of Monitoring for Different Vapour Recovery Systems

Type of System	Tests Required (post-commissioning)
Active system <i>with</i> automatic monitoring	Vapour containment integrity = 3 years Vapour recovery effectiveness (V/P ratio) = 3 years
Active system <i>without</i> automatic monitoring	Vapour containment integrity = 3 years Vapour recovery effectiveness (V/P ratio) = 1 year
Other systems	Vapour containment integrity = 3 years Vapour recovery effectiveness = 1 year (according to manufacturer's specification)

5.22 Operators should record in a log book details of all maintenance, examination and testing, installation and repair work carried out for Stage II controls. Details of training (5.24) given to operating staff at the service station should also be recorded. Operators should maintain the log book at the permitted installation.

5.23 Operators should also undertake a weekly check to verify functionality of the vapour recovery system where an automatic monitoring system is not employed. Such checks should include:

- A test of functionality of the vapour recovery system using appropriate equipment;
- An inspection for torn, flattened or kinked hoses and damaged seals on vapour return lines;
- An entry of the checks and findings in the station log book (see paragraph 5.22)

5.24 Where weekly functionality checks are required, operators should ensure that all relevant staff is trained to perform the checks in accordance with the manufacturers instructions. In all cases, relevant staff should be trained in the use of preventative maintenance for vapour recovery systems to the manufacturers instructions.

5.25 Adverse results from **any** monitoring activity (both continuous and non-continuous) should be investigated by the operator as soon as the monitoring data has been obtained/received. The operator should:

- identify the cause and take corrective action
- record as much detail as possible regarding the cause and extent of the problem, and the action taken by the operator to rectify the situation
- re-test to demonstrate compliance as soon as possible; and
- notify the regulator

6 Control techniques

Stage I Controls

- 6.1 Vapour collection systems should be sized and designed to minimise vapour emission occurring during the maximum petrol and vapour flow in accordance with paragraphs **5.1 - 5.3** (i.e. when the maximum number of tanker compartments are being simultaneously discharged).
- 6.2 In the case of existing vapour collection systems, an assessment should be made of the maximum number of tanker compartments which can be discharged whilst still maintaining the integrity of the vapour collection system.
- 6.3 The design or assessment should not account for diesel if the storage tank is separately vented, but should be included if it utilises the same vent pipe as the petrol storage tanks.
- 6.4 The connection points on the tank filling pipes and vapour return pipe should be fitted with secure seals to reduce vapour leaks when not in active use. Similarly if apertures are provided on storage tanks for the use of a dipstick, these should also be securely sealed when not in active use.
- 6.5 The fittings for delivery and vapour return pipes should be different to prevent misconnection.
- 6.6 Storage tank vent pipes should be fitted with a pressure vacuum relief valve to reduce vapour loss or a similar device which is at least as effective in minimising emissions during unloading. Pressure vacuum relief valves should be sized and weighted to prevent vapour loss and potentially hazardous pressurisation. Storage tank pressurisation outwith unloading periods should be avoided through the use of a 50mm orifice plate. Operators should note that the sizing, siting and safety features associated with fitting pressure vacuum relief valves and orifice plates may be subject to health and safety legislation.
- 6.7 Vent pipes should normally discharge not less than 3 metres above the ground, nor within 3 metres of any opening windows or ventilation air inlets.
- 6.8 Where service stations use dip tubes or hydrostatic gauging and are not excluded by paragraph **6.12**, the equipment in paragraph **6.9** may be fitted in order to avoid unsafe working conditions.
- 6.9 An additional vent rising from the manifold system with a ball stop valve should be installed allowing it to be opened to relieve pressure on the system prior to tank dipping or gauge reading. The valve should be of the dead man's handle type, with a locking device, to prevent its being left open at any other time.
- 6.10 The valve described in paragraph **6.9** should be checked to ensure that it is closed before any hose is connected, and the valve should not be open during any delivery.
- 6.11 Emissions from a valve described by paragraph **6.9** should be kept to a minimum. Installations incorporating these arrangements should be pressure tested before being brought into operation.
- 6.12 Arrangements as described in paragraphs **6.8 - 6.11** are not appropriate under any of the following circumstances
- Petrol stations with any gauging other than hand dipping or hydrostatic gauges not designed to be compatible with Stage 1 equipment;
 - Any new petrol station; or
 - Any petrol station subject to redevelopment involving work on underground storage tanks or modifications to tank-related pipework
- 6.13 When connecting hoses prior to delivery, the vapour return hose should be connected before the delivery hoses. The vapour return hose should be connected by the road tanker end first, and then at the storage tank end. (The Health and Safety Executive has expressed the view that the procedures in paragraphs **6.13** and **6.18** are recommended for safety as well as environmental reasons). If diesel only is delivered to storage tanks which are not manifolded with petrol tanks then a vapour recovery line is not required.
- 6.14 Adjacent to each vapour return connection point, there should be a clearly legible and durable notice instructing "Connect vapour return line before off - loading" or similar wording. In the case of direct fill operations where the filling points are underground, the sign may be located nearby above ground provided it is easily visible from the fill points. In addition, either:
- (a) the sign should also refer to the maximum number of tanker compartments which may be unloaded simultaneously in accordance with paragraph **6.1**, or

- (b) a clear statement of the maximum number of tanker compartments which may be unloaded simultaneously in accordance with paragraph 6.1 should be included on the Petroleum Delivery Certificate, whichever is preferred by the operator.
- 6.15 If dip testing of storage tanks or road tanker compartments is performed before delivery, the dip openings should be securely sealed prior to the delivery taking place.
- 6.16 Road tanker compartment dip testing should not be performed whilst the vapour hose is connected, except in the case of split compartment deliveries where dip testing is carried out, which can be safely undertaken to the satisfaction of the Petroleum Licensing Authority. Regulators should expect split compartment deliveries where dip testing is carried out to be kept to the minimum. Guidance on split compartment deliveries can be found in the Energy Institute publication "Offloading Procedures for Split Compartment Deliveries of Petrol Between Service Station Sites".
- 6.17 All road tanker compartment vent and discharge valves should be closed on completion of the delivery.
- 6.18 On completion of unloading, the vapour hose should not be disconnected until the delivery hoses have been discharged and disconnected. The delivery hoses should be disconnected at the road tanker end first, whilst the vapour return hose should be disconnected at the storage tank end first.
- 6.19 All connection points should be securely sealed after delivery.
- 6.20 If the storage tanks or road tanker compartments are dipped after delivery, the dip openings should be securely sealed immediately after dip testing.
- 6.21 Manhole entry points to storage tanks should be kept securely sealed except when maintenance and testing are being carried out which require entry to the tank.

Stage II Controls

- 6.22 Vapour recovery systems for filling of vehicle petrol tanks should be designed to minimise vapour emission occurring during filling of vehicle petrol tanks in accordance with paragraphs 5.13 - 5.17.
- 6.23 Operators should not be constrained as to the specific techniques to be used in recovery of vapours during filling of vehicle petrol tanks, provided that the requirements of paragraphs 5.13 - 5.17 are adhered to. Examples of techniques that can be used are provided below. In all cases, however, appropriate approval of the equipment should be ensured, as described in paragraph 5.16.

Open Active Vapour Recovery with Return of Vapours to Underground Storage Tank

- 6.24 When petrol enters the vehicle tank, an active vapour recovery system (open active petrol vapour recovery system) uses a vacuum pump to suck a corresponding volume of vapours back into a storage tank.
- 6.25 Components of an open active petrol vapour recovery system may include:
- A vapour recovery nozzle;
 - A hose through which vapours are collected (coaxial or similar) and a pipe through which the vapours are returned (this may be separate from the fuel line or may be inserted into the fuel line);
 - A vacuum pump;
 - A system to control the ratio of the volume of vapour recovered to the volume of petrol dispensed into the vehicle tank;
 - A vapour storage tank (i.e. the petrol storage tank).
- 6.26 The control of the ratio of the volume can be achieved by
- A proportional valve controlled either hydraulically or electronically; or
 - Controlling the speed of the vacuum pump

Active recovery of vapours as petrol at the dispenser

- 6.27 Alternative vapour recovery systems may be used, in which petrol vapours are recovered at the dispenser and returned direct for re-sale. Such equipment may include:
- Standard nozzles and hoses designed for petrol vapour recovery as used where the vapours are returned to the underground storage tank;
 - A vacuum pump which sucks the vapour through the nozzle and hose;
 - A heat exchanger which condenses the petrol vapours and a tank in which water is separated and the recovered petrol stored.

- The recovered petrol is then passed to the dispenser petrol lines during refilling.

Passive vapour recovery

- 6.28 'Passive' or 'balance' vapour recovery systems do not include a vacuum pump. Instead, the pressure exerted by the displaced petrol vapours is used to drive the vapours back into the storage tank. In such a system, a rubber bellows/boot is required in order to ensure that there is a seal between the vehicle and the nozzle. These systems require greater control on the part of the vehicle owner in ensuring an adequate seal and are generally seen as being more unwieldy than the techniques referred to above.

General Remarks

- 6.29 The above descriptions do not preclude use of any other equipment, provided that the minimum hydrocarbon capture efficiency requirements (85%) are met (determined under type approval tests in accordance with paragraph 5.16).
- 6.30 Under no circumstances should the vapour return line be manifolded to any diesel tanks present.

Air quality

- 6.31 In areas where air quality standards or objectives are being breached or are in serious risk of breach and it is clear from the detailed review and assessment work under Local Air Quality Management that the Part C process itself is a significant contributor to the problem, it may be necessary to impose tighter emission limits. If the air quality standard that is in danger of being exceeded is not an EC Directive requirement, then industry is not expected to go beyond BAT to meet it. Decisions should be taken in the context of a district council's Local Air Quality Management action plan. For example, where a Part C process is only responsible to a very small extent for an air quality problem, the council should not unduly penalise the operator of the process by requiring disproportionate emissions reductions. More guidance on this is provided in the revised Local Air Quality Management Technical Guidance, LAQM. TG (03) and in the Environment (NI) Order 2002 Local Air Quality Management Policy Guidance.

Revised stack height calculations should not be required unless it is considered necessary because of a breach or serious risk of breach of an EC Directive limit value and because it is clear from the detailed review and assessment work that the Part C process itself is a significant contributor to the problem.

- 6.32 The EU has set a limit value for benzene levels in ambient air of 5mg/m³ as an annual mean to be achieved by 2010 (Council Directive 2000/69/EC of 16 November 2000 relating to limit values for benzene and carbon monoxide in ambient air).

Air quality objectives for benzene in Northern Ireland are contained in The Air Quality (NI) Regulations 2003:

- 16.25g/m³ as a running annual mean to be achieved by 31 December 2003,
- 3.25g/m³ as a running annual mean to be achieved by 31 December 2010.

Management

- 6.33 Important elements for effective control of emissions include:
- proper management, supervision and training for operations;
 - proper use of equipment;
 - clear instructions on when equipment should not be used;
 - effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air; and
 - it is good practice to ensure that spares and consumables are available at short notice in order to rectify breakdowns rapidly. This is important with respect to arrestment plant and other necessary environmental controls. It is useful to have an audited list of essential items.

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

- 6.34 Effective management is central to environmental performance; it is an important component of BAT and of achieving compliance with permit conditions. It requires a commitment to establishing objectives, setting targets, measuring progress and revising the objectives according to results. This includes managing risks under normal operating conditions and in accidents and emergencies. It is therefore desirable that operators put in place some form of structured environmental management approach, whether by adopting published standards (ISO 14001 or

the EU Eco Management and Audit Scheme [EMAS]) or by setting up an environmental management system (EMS) tailored to the nature and size of the particular installation. Operators may also find that an EMS will help identify business savings.

- 6.35 Regulators should use their discretion, in consultation with individual operators, in agreeing the level of environmental management appropriate to any particular installation. Simple systems which ensure that LAPPC considerations are taken account of in the day-to-day running of an installation may well suffice, especially for small and medium-sized enterprises. While authorities may wish to encourage wider adoption of EMS, it is outside the legal scope of an LAPPC permit to require an EMS for purposes other than LAPPC compliance. For further information/advice on EMS refer to EMS Additional Information in **Section 8**.
- 6.36 All service station operators must follow the procedures for safe operation for petrol unloading operations laid down in petroleum licence conditions and in the Carriage of Dangerous Goods by Road Regulations (NI) 1997. At the time of revising this guidance note, consultation is taking place on an amendment to those conditions and regulations. This includes a partial substitution by an Approved Code of Practice.
- 6.37 The procedures in paragraphs **5.10 - 5.12, 6.13 - 6.21, 6.34, 6.36** and **6.38** should be reviewed in light of relevant modifications which occur to the facilities.
- 6.38 Staff at all levels need the necessary training and instruction in their duties relating to control of the installation and emissions to air. In order to minimise risk of emissions, particular emphasis should be given to control procedures during startup, shut down and abnormal conditions.

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

Training of all staff with responsibility for operating the installation should include:

- awareness of their responsibilities under the permit; in particular supervising and performing unloading operations of tankers, for example
- action to minimise emissions during abnormal conditions
- occurrences which require the equipment to be shut down

The operator should maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents should be made available to the regulator on request.

- 6.39 Effective preventative maintenance should be employed on all aspects of the installation including all plant, buildings and the equipment concerned with the control of emissions to air. In particular:
- A written maintenance programme should be provided to the regulator with respect to pollution control equipment; and
 - A record of such maintenance should be made available for inspection.

7 Summary of changes

Reasons for the main changes are summarised below.

Table 2: Summary of changes

Section and paragraph	Change	Reason	Comment
General	References to Industrial Pollution Control (NI) Order 1997 and LAPC removed	Relevant date for PPC transfer surpassed as of April 2005	
1. Introduction			
1.5	Introduction of Stage II controls	Context	
2. Timetable for Compliance and Reviews			
	Removed timescales for Stage I and introduced Stage II thresholds	Stage I required to be complete by 31/12/04	Thresholds and definitions of new and existing stations to be decided
3. Process Description			
3.19, 3.20	Basis for Stage II and exempt stations	To reflect Stage II requirements	
4. Potential Releases			
4.2	Emissions from refuelling	As the basis for Stage II	
5. Emission Limits, Monitoring and Other Provisions			
5.8	Reference to ACoP L133	Change of responsibilities	
5.13-5.25	Requirement to implement Stage II, including technical requirements and monitoring	Including proposed prescribed requirements and means of compliance	
6. Control Techniques			
6.6	Reference to tank pressurisation prevention strategies.	Rectify vapour system to ensure functionality of PVR 11.	
6.22-6.28	Stage II techniques	Description of available technology types	
8. Definitions			
8	Stage II definitions added	Clarification and explanation	Redundant clauses removed
8	References added	To reflect Stage II	
9. Outline PPC Part C Application			
9	Stage II questions added	Required information on Stage II	Removed old Section 9 (LAPC application form)
10. Outline Permit - Stage I Only			
10	Reference to Industrial Pollution Control (NI) Order 1997	Relevant date for PPC transfer surpassed	
11. Outline Permit - Stage I and II Controls			
11	Additional conditions for Stage II		
Appendices			
	LAPC regulations extract removed	Relevant date for PPC transfer surpassed as of April 2005	

8 Definitions and further information

This guidance	NI Process Guidance Note 1/14 (Version 3)
Previous guidance	NI Process Guidance Note 1/14 (Version 2)
LAPC	explained in the Introduction of this guidance
LAPPC	explained in the Introduction of this guidance
Permit	the written permission to operate an installation prescribed for LAPPC– (the replacement for authorisation under LAPC)
Installation	should be interpreted in accordance with the guidance contained in the General Guidance Manual on Policy and Procedures for Part C Installations: www.doeni.gov.uk/epd .
Petrol	<p>is defined in Directive 94/63/EC as any petroleum derivative with or without additives, having a Reid vapour pressure of 27.6kPa or more, which is intended for use as a fuel for motor vehicles, except liquefied petroleum gas (LPG).</p> <p>In addition the Government's view is that the definition of petrol</p> <ul style="list-style-type: none"> · includes leaded, unleaded and lead replacement gasoline and · excludes diesel motor fuel, kerosene and aviation fuels (some aviation fuels exceed the vapour pressure but aircraft are not motor vehicles for the purposes of the definition) The Department's view is not definitive as it is ultimately the courts that interpret legislation
Vapours	means any gaseous compound which evaporates from petrol.
Mobile container	means any tank, transported by road, rail or waterways used for the transfer of petrol from one terminal to another or from a terminal to a service station.
Service station	means any installation where petrol is dispensed to motor vehicle fuel tanks from stationary storage tanks. This includes both retail and non-retail sites.
Existing	means service stations which are in operation, or for the construction of which planning permission is granted, before 31st August 1998. For Stage II controls, existing means service stations which are in operation or for the construction of which planning permission is granted, before 31 st December 2009.
New	<p>means service stations which are not covered by the definitions of "existing" stations.</p> <p>It is the the Department's general view that the main circumstances where the "new installation" requirements would be triggered at an existing service station would be where modifications were proposed to the tankage, tank vents, or tanker connection points and where these modifications required planning permission</p> <p>The Department is of the opinion that the grant of outline planning permission for the construction of a service station prior to 31 August 1998 would bring that station into the definition of "existing".</p> <p>The Government's general view and opinion are not definitive as it is ultimately the courts that interpret legislation</p>
Throughput	means the largest total annual quantity of petrol unloaded from mobile containers into a service station during the three years preceding the relevant date. This means that the compliance deadline will apply if the throughput figure is exceeded in any of the three immediately preceding years, which will always include the most recent year. For example, if the throughput exceeds 500m ³ at a service station for the first time in 2005 then that service station should be regarded as having "a throughput greater than 500m ³ " in the year 2006.

LAPPC and LAPC	Unloading of Petrol into Storage at Petrol Stations
Target reference value	means the guideline given for the overall assessment of the adequacy of technical measures in the note and is not a limit value against which the performance of individual installations at service stations would be measured.
Vapour collection system	includes a system of delivery of petrol whereby the vapours displaced from the storage tank are returned to the road tanker by a vapour balance pipe.
Hydrocarbon capture efficiency of vapour recovery system	<p>Equipment for vapour recovery should be designed to ensure a vapour recovery efficiency of 85% measured during an appropriate type approval test. The efficiency is defined as:</p> $\text{Eff (\%)} = ((\text{BE} - \text{RE}) / \text{BE}) \times 100$ <p>(where Eff is efficiency; BE is base emissions of petrol vapours to atmosphere without Stage II petrol vapour recovery in place; RE is the residual emissions of petrol vapours to atmosphere with Stage II measures in place).</p> <p>For vapour recovery systems with type approval from another European Union, European Economic Area or European Free Trade Association country, the hydrocarbon capture efficiency required by that country should be taken as being equivalent to the above.</p>
Type approval test	A test undertaken to gain approval for use. In the context of this note, this term is used in relation to approval for use of a vapour recovery system in petrol dispensers for compliance with national regulations. The test will typically include leakage tests and metrology tests as well as tests on hydrocarbon capture efficiency and volumetric efficiency (P/V ratio).
Vapour/Petrol (V/P) ratio	The ratio between the vapour volume at atmospheric pressure passing through the vapour recovery system and the volume of petrol dispensed.
Exempt service station	<p>exempt service station means a service station -</p> <p>at which the total quantity of petrol unloaded into stationary storage tanks does not exceed 500m³ in any 12-month period.</p> <p>Additionally, in relation to provisions for Stage II controls only, exempt service station means an existing service station where the throughput of petrol does not exceed 3500m³ in any 12-month period.</p>
Vapour lock	<p>is a phenomenon that can occur during a road tanker delivery and is identified by a stoppage in the flow of product before the road tanker's compartment is fully discharged. There are two possible causes of vapour lock:</p> <p>i) Where there is an insufficient head of product in the road tanker compartment to force the air/vapour mixture in the delivery hose and fill pipe through the residual product in the storage tank. This cause of vapour lock can affect both atmospheric (free venting) and vapour balanced deliveries.</p> <p>ii) Where there is a back flow of vapour into the delivery hose from a leak in the storage tank's internal fill pipe. This cause will only arise during vapour balanced deliveries.</p>

Health and safety

Operators of installations must protect people at work as well as the environment:

- requirements of a permit or authorisation should not put at risk the health, safety or welfare of people at work
- equally, the permit or authorisation must not contain conditions whose only purpose is to secure the health of people at work. That is the job of the health and safety enforcing authorities

Where emission limits quoted in this guidance conflict with health and safety limits, the tighter limit should prevail because:

- emission limits under the Pollution Prevention and Control Regulations (NI) 2003 relate to the concentration of pollutant released into the air from prescribed activities
- exposure limits under health and safety legislation relate to the concentration of pollutant in the air breathed by workers
- these limits may differ since they are set according to different criteria. It will normally be quite appropriate to have different standards for the same pollutant, but in some cases they may be in conflict (for example, where air discharged from an installation is breathed by workers). In such cases, the tighter limit should be applied to prevent a relaxation of control

EMS additional information

Further information/advice on EMS may be found from the following:

- Envirowise at www.envirowise.gov.uk and www.energy-efficiency.gov.uk and Environment and Energy Helpline freephone 0800 585794
- ISO 14001 www.bsi.org.uk or telephone BSI information centre (020 8966 7022)
- EU Eco Management and Audit Scheme (EMAS) www.emas.co.uk or telephone the Institute of Environmental Management and Assessment (01522 540069)

Regulators and operators may also like to be aware of:

BS 8555: a new standard to help SMEs implement an EMS, by offering a five-phase approach, is contained in BS 8555 which was published in 2003 following on from work undertaken by the Acorn Trust. The Institute of Environmental Management and Assessment, which has taken over the Trust's activities, is developing a scheme of accredited recognition for companies achieving different phases of BS 8555. BS 8555 can be used to achieve ISO 14001 and registration to the higher standard, EMAS.

Some of the **High Street banks**, such as NatWest and the Coop, now offer preferential loan rates to organisations that can demonstrate they are committed to improving their environmental performance. The NatWest also produce a self help guide for SMEs, 'The Better Business Pack', focusing on waste, utilities, transport and supply chain issues. It gives tools, guidance and examples. Contact: WWF-UK on 01483 426444.

References

- (a) The Department's General Guidance Manual on Policy and Procedures for Part C Installations, September 2003 - available from the Department's website on www.doeni.gov.uk/epd.
- (b) Scottish Executive Guidance: The Practical Guide for Part B Activities Issue 1 - available from the SEPA web-site. http://www.sepa.org.uk/pdf/ppc/guidance/practical_guide_part_b_activities.pdf
- (c) Section 10 of NIGG2 "Authorisations" (issued March 1998) provides further advice on the assessment of odour.
- (d) Current air quality objectives are specified in: The Air Quality (NI) Regulations 2003 (2003 No 342)
- (e) Guidance for the Design, Construction, Modification Maintenance and Decommissioning of Petrol Filling Stations. Published jointly by Association for Petroleum and Explosives Administration, and Energy Institute, March 2005.
- (f) Guidelines for the Design and Operation of Gasoline Vapour Emission Controls, published by the Institute of Petroleum, 1992, ISBN 0-85293-105-0, Z; £21 net. This is the edition current at the time of publication of this note.
- (g) PETEL 65/61, Model Licensing Conditions
- (h) HSE, HSG146 Dispensing petrol
- (i) HELA LACOTS PETEL, 65/26 July 1999 Petrol Filling Stations - Safety Concerns Regarding Stage 1b Vapour Recovery
- (j) HELA LACOTS PETEL, 65/34 October 2000 Leak Detection in Tanks and Pipework
- (k) HELA LACOTS PETEL, 65/30 November 2000 Petrol Filling Stations - Stage 1b Vapour Recovery-Safety Concerns When Diesel Tanks Are ManifolDED With Petrol Tanks
- (l) Specification for construction of vapour recovery systems installed in petrol metering pumps and dispensers, Product Assessment Specification PAS 022:1997, British Standards Institute.
- (m) Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution Concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes, (http://www.unece.org/env/lrtap/vola_h1.htm).
- (n) Offloading Procedures for Split Compartment Deliveries of Petrol Between Service Station Tanks, published by the Institute of Petroleum, ISBN 0 85293 353 3.
- (o) Unloading petrol from road tankers - Dangerous Substances and Explosive Atmospheres Regulations 2002, Approved Code of Practice and Guidance, Health and Safety Executive, ISBN 0 7176 2197 9.

Web addresses

Web-site of the Department's Environmental Policy Division: www.doeni.gov.uk/epd

Web-site of the Department's Environment and Heritage Service: www.ehsni.gov.uk/

Energy saving and environmental management measures can increase industry profits. Envirowise (formerly ETBPP) show how at www.envirowise.gov.uk (or freephone 0800 585794)

9 Outline PPC Part C application form

The following is a specimen application form, which has been the subject of consultation with industry representatives, members of the Industrial Pollution Liaison Committee, chaired by DEFRA, and members of the NI Industrial Pollution Liaison Group, and since adapted for PPC Part C and to take into account requirements for recovery of vapours during filling of vehicle petrol tanks ("Stage II" controls). Given the consistent nature of service station operations, it is likely to be more efficient for both industry and regulators to make use of this form in all cases.

Use this form if you are applying for a permit to a district council to operate a service station where petrol is unloaded with a throughput of petrol over 500m³ a year.

For existing petrol stations with a throughput greater than 3500m³ in any 12 month period and for new petrol stations with a throughput likely to exceed 500m³ in any 12 month period, a "Stage II" petrol vapour recovery system is required for recovery of vapours during filling of vehicle petrol tanks. If the petrol station is not required to have "Stage II" controls in place, those sections of this form that relate to Stage II controls do not need to be completed.

References to the term "activity" are references to the unloading into storage of petrol and dispensing of petrol into vehicle fuel tanks. The operator of the activity under the terms of the Regulations 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 regulation 33(8) of the Regulations.

Further advice on transfer of permits and on permit variations may be found in the General Guidance Manual (See Ref. (a))

Application for a permit

Pollution Prevention and Control Part C

Environment (NI) Order 2002

Pollution Prevention and Control Regulations (NI) 2003 (as amended)

For district council use		
Application reference	Officer reference	Date received

A1.1 Name of the installation

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

Postcode

Telephone

Ordnance Survey national grid reference 8 characters,

for example, NW 463 294

A1.3 Existing authorisations:

Please give details of any existing LAPC or IPC authorisation or LAPPC permit for the installation, including reference number(s):

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 or corporate body

Trading/business name (if different)

Registered Office address

Postcode:

Principal Office address (if different)

Postcode:

Company registration number

A2.2 Holding Companies

Is the operator a subsidiary of a holding company within the meaning of Article 4 of the Companies (NI) Order 1986

No	Yes (name of ultimate holding company)

Registered office address

Postcode

Principal Office address (if different)

Postcode

Company registration number:

A3.1 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 could be an agent or consultant rather than the operator.

Name

Position

Address

Postcode

Telephone number

Fax number

e-mail address

B1.2 Why is the application being made?

- the installation is new
- it is an existing Part C process authorised under the Industrial Pollution Control (NI) Order 1997 for which a substantial change is proposed within 4 months of the transitional date and an LAPPC permit is required.
- it is an existing installation that is required to have a "Stage II" vapour recovery system in place according to Pollution Prevention and Control (Amendment) Regulations (NI) 2007.

Doc Reference:

B2.1 Is the service station located under permanent living quarters or working areas? See Section 2 of NIPG1/14 (Version 3).

No	Yes

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

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)?

B2.4. Volume of petrol unloaded into the service station in each of the last three calendar years (See Section 2 of NIPG1/14(Version 3) for the relevant timescales); in cubic metres (i.e. litres divided by 1000). Circle the appropriate band

YEAR	VOLUME OF PETROL/m ³				
	<100	100-500	501-1000	>1000	>3500
	<100	100-500	501-1000	>1000	>3500
	<100	100-500	501-1000	>1000	>3500
	<100	100-500	501-1000	>1000	>3500

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

No	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 NIPG1/14(Version 3).

.....

.....

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

No	Yes
-----------	------------

B2.8 Measures taken or to be taken for vapour emission control, both during unloading and in Storage.

.....

.....

B2.9 Please attach process diagrams and plans of vapour collection equipment (including height and location of tank vent pipes). This should include equipment for recovery of vapours during filling of underground storage tanks and for installations that are required to have a "Stage II" vapour recovery system in place, for filling of vehicle 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 on-site 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]

.....

.....

.....

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 filling of vehicle petrol tanks for installations that are required to have a "Stage II" vapour recovery system in place). [please attach]

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 displaced 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 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) [please attach].

2.17 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	Yes
----	-----

B3.1 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?)

Doc Reference:

B3.2 Are there any areas of special scientific interest (ASSIs) or European Sites which are within 500 metres of the installation?

No	Yes, please give names of the sites Doc Reference
----	--

B3.3 Provide an assessment of whether the installation is likely to have a significant effect on such sites and, if it is, provide an assessment of the implications of the installation for that site, for the purposes of the Conservation (Natural Habitats etc) Regulations (NI) 1995.

Doc Reference:

B4 Environmental Statements

B4.1 Has the development of the installation (or any subsequent change or extension of the development) required an environmental statement under Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, or for any other reason?

No	Yes, (Please supply a copy of the environmental impact Doc Reference
----	---

B5 Additional information

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

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 for invoices to be sent to** and details of someone we may contact about fees and charges within your finance section.

Postcode:

Telephone:

C3 Data Protection

The information you give will be used by the council 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,
- investigate possible breaches of environmental law and take any resulting action,
- prevent breaches of environmental law,
- 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 33 of the PPC 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).

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:

Signature

Name

Position

Date

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.

10 Outline Authorisation/Permit (Stage I only)

ANY PLACE DISTRICT COUNCIL

Environment (NI) Order 2002

Pollution Prevention and Control Regulations (NI) 2003 (as amended)

Permit ref. no.

(i) **Name and address of operator** + (if appropriate) registered number and office of company.

(ii) **Address of permitted installation:** [outlined on attached plan; + include location of vent]

The above named company is permitted to operate an installation unloading of petrol into stationary storage tanks at the service station above subject to compliance with the following conditions. The service station has [no. of] storage tanks.

Conditions

1. Vapours displaced by the delivery of petrol into storage installations at service stations shall be returned through a vapour tight connection line to the road tanker delivering the petrol. Unloading operations may not take place unless the arrangements are in place and properly functioning, subject to conditions 3, 4 and 5.

2. The operator shall implement the schedule of preventative maintenance. (document referenced provided as part of the application for authorisation/permit dated [date].

3. All reasonably practicable steps shall be taken to prevent uncontrolled leaks of vapour from vents, pipes and connectors from occurring. The regulator shall be advised without delay of the circumstances of such a vapour leak if there is likely to be an effect on the local community, and in all cases such a vapour leak should be recorded in the log book required under condition 24. In this condition and in condition 4 a vapour leak means any leak of vapour excepting those which occur through the vent mentioned in condition 11 during potentially hazardous pressurisation.

4. The operator shall advise the regulator of the corrective measures to be taken and the timescales over which they will be implemented in the event of a vapour leak described in condition 3.

5. Instances of vapour lock shall be recorded in the log book and, under the circumstances detailed in condition 3, be advised to the regulator.

6. The procedures in conditions 2 to 5 inclusive shall be reviewed in light of any modifications which occur to the facilities. The regulator shall be advised of any proposed alteration in operating procedures.

7. The vapour collection systems shall be of a size and design, as approved by the regulator, to minimise vapour emission during the maximum petrol and vapour flow in accordance with conditions 1 and 8 (i.e. when most tank compartments are being simultaneously discharged). [In the case of existing vapour collection systems, an assessment shall be made of the maximum number of tanks which can be discharged whilst still maintaining the integrity of the vapour collection system.] [See Section 6 of NIPG1/14(VERSION 3)]

8. The number of tanker compartments being discharged simultaneously shall not exceed [number], [including/excluding] the diesel compartment[s].

9. The connection points on the tank filling pipes and vapour return pipe shall be fitted with secure seals to reduce vapour leaks when not in active use. If apertures are provided on storage tanks for the use of a dipstick, these shall be securely sealed when not in active use.

10. The fittings for delivery and vapour return pipes shall be different to prevent mis-connection.

11. Petrol storage tank vent pipe[s] shall be fitted with a [pressure vacuum relief valve] [named other device] to minimise vapour loss during unloading and storage of petrol. [The pressure vacuum relief valve shall be sized and weighted to prevent vapour loss, except when the storage tanks are subject to potentially hazardous pressurisation.]

12. When connecting hoses prior to delivery, the vapour return hose shall be connected before any delivery hose. The vapour return hose shall be connected by the road tanker end first, and then at the storage tank end.

13. Adjacent to each vapour return connection point for the storage tank, there shall be a clearly legible and durable notice instructing "Connect vapour return line before off-loading" or similar wording. The sign shall also refer to the maximum number of tanker compartments which may be unloaded simultaneously in accordance with condition 8.

14. If dip testing of storage tanks or road tanker compartments is performed before delivery, the dip openings shall be securely sealed prior to the delivery taking place.

15. Road tanker compartment dip testing shall not be performed whilst the vapour hose is connected [See Paragraph 6.13 of NIPG1/14(Version 3).]

16. A competent person shall remain near the tanker and keep a constant watch on hoses and connections during unloading. [A competent person is one who has received training in accordance with Section 5 of NIPG1/14(Version 3).]

17. All road tanker compartment vent and discharge valves shall be closed on completion of the delivery.

18. On completion of unloading the vapour hose shall not be disconnected until the delivery hose has been discharged and disconnected. The delivery hose shall be disconnected at the road tanker end first. The vapour return hose shall be disconnected at the storage tank end first.

19. All connection points shall be securely sealed after delivery.

20. If the storage tanks or road tanker compartments are dipped after delivery, the dip openings shall be securely sealed after dip testing.

21. Manhole entry points to storage tanks shall be kept securely sealed except when maintenance and testing are being carried out which require entry to the tank.

22. Petrol delivery and vapour return lines shall be tested in accordance with the schedule provided as part of the application for authorisation dated [date] [or such other schedule as may be agreed by the regulator].

23. [Pressure vacuum relief valves] [Named other devices] on petrol storage tank vents shall be checked for correct functioning, including extraneous matter, seating and corrosion at least once every three years.

24. The operator shall maintain a log book at the authorised premises incorporating details of all maintenance, examination and testing, inventory checking, installation and repair work carried out, along with details of training given to operating staff at the service station.

The log book shall also detail any suspected vapour leak together with action taken to deal with any leak, in accordance with Conditions 3, 4 and 5.

25. Venting of the petrol vapour shall be through the vent pipes marked [] on the attached plan reference []. [See Paragraph 6.7 of NIPG1/14(Version 3)].

Signed: Date:

Explanatory Note

[To be inserted by the council as appropriate along with appeal provisions etc]

[The explanatory note should indicate that the general BATNEEC condition is regarded as covering, among any other matters, the provision of sufficient training and practical instruction for service station operation staff; in order to enable them to carry out their duties in respect of using (or supervising the use of) and maintaining vapour collection controls, and the actions to be taken in the event of leak of vapour.]

11 Outline Authorisation/Permit (Stages I and II)

ANY PLACE DISTRICT COUNCIL

Environment (NI) Order 2002

Pollution Prevention and Control Regulations (NI) 2003 (as amended)

Permit ref. no.

(i) **Name and address of operator** + (if appropriate) registered number and office of company.

(ii) **Address of permitted installation:** [outlined on attached plan; + include location of vent]

The above named company is permitted to operate an installation unloading of petrol into stationary storage tanks and filling of vehicle petrol tanks at the service station above subject to compliance with the following conditions. The service station has [no. of] storage tanks and [no. of] nozzles dispensing petrol.

Conditions

1. Vapours displaced by the delivery of petrol into storage installations at service stations shall be returned through a vapour tight connection line to the road tanker delivering the petrol. Unloading operations may not take place unless the arrangements are in place and properly functioning, subject to conditions 3, 4 and 5.

2. The operator shall implement the schedule of preventative maintenance. [document referenced provided as part of the application for authorisation/permit dated [date]].

3. All reasonably practicable steps shall be taken to prevent uncontrolled leaks of vapour from vents, pipes and connectors from occurring. The regulator shall be advised without delay of the circumstances of such a vapour leak if there is likely to be an effect on the local community, and in all cases such a vapour leak should be recorded in the log book required under condition 24. In this condition and in condition 4 a vapour leak means any leak of vapour excepting those which occur through the vent mentioned in condition 11 during potentially hazardous pressurisation.

4. The operator shall advise the regulator of the corrective measures to be taken and the timescales over which they will be implemented in the event of a vapour leak described in condition 3.

5. Instances of vapour lock shall be recorded in the log book and, under the circumstances detailed in condition 3, be advised to the regulator.

6. The procedures in conditions 2 to 5 inclusive and conditions 24 to 27 inclusive shall be reviewed in light of any modifications which occur to the facilities. The regulator shall be advised of any proposed alteration in operating procedures.

7. The vapour collection systems shall be of a size and design, as approved by the regulator, to minimise vapour emission during the maximum petrol and vapour flow in accordance with conditions 1 and 8 (i.e. when most tank compartments are being simultaneously discharged). [In the case of existing vapour collection systems, an assessment shall be made of the maximum number of tanks which can be discharged whilst still maintaining the integrity of the vapour collection system.] [See Section 6 of NIPG1/14 (Version 3)]

8. The number of tanker compartments being discharged simultaneously shall not exceed [number], [including/excluding] the diesel compartment[s].

9. The connection points on the tank filling pipes and vapour return pipe shall be fitted with secure seals to reduce vapour leaks when not in active use. If apertures are provided on storage tanks for the use of a dipstick, these shall be securely sealed when not in active use.

10. The fittings for delivery and vapour return pipes shall be different to prevent mis-connection.

11. Petrol storage tank vent pipe[s] shall be fitted with a [pressure vacuum relief valve] [named other device] to minimise vapour loss during unloading and storage of petrol. [The pressure vacuum relief valve shall be sized and weighted to prevent vapour loss, except when the storage tanks are subject to potentially hazardous pressurisation.]

12. When connecting hoses prior to delivery, the vapour return hose shall be connected before any delivery hose. The vapour return hose shall be connected by the road tanker end first, and then at the storage tank end.

13. Adjacent to each vapour return connection point for the storage tank, there shall be a clearly legible and durable notice instructing "Connect vapour return line before off-loading" or similar wording. The sign shall also refer to the maximum number of tanker compartments which may be unloaded simultaneously in accordance with condition 8.

14. If dip testing of storage tanks or road tanker compartments is performed before delivery, the dip openings shall be securely sealed prior to the delivery taking place.

15. Road tanker compartment dip testing shall not be performed whilst the vapour hose is connected [See paragraph 6.13 of NIPG1/14(Version 3).]

16. A competent person shall remain near the tanker and keep a constant watch on hoses and connections during unloading. [A competent person is one who has received training in accordance with Section 5 of NIPG1/14(Version 3).]

17. All road tanker compartment vent and discharge valves shall be closed on completion of the delivery.

18. On completion of unloading the vapour hose shall not be disconnected until the delivery hose has been discharged and disconnected. The delivery hose shall be disconnected at the road tanker end first. The vapour return hose shall be disconnected at the storage tank end first.

19. All connection points shall be securely sealed after delivery.

20. If the storage tanks or road tanker compartments are dipped after delivery, the dip openings shall be securely sealed after dip testing.

21. Manhole entry points to storage tanks shall be kept securely sealed except when maintenance and testing are being carried out which require entry to the tank.

22. Petrol delivery and vapour return lines shall be tested in accordance with the schedule provided as part of the application for authorisation dated [date] [or such other schedule as may be agreed by the regulator].

23. [Pressure vacuum relief valves] [Named other devices] on petrol storage tank vents shall be checked for correct functioning, including extraneous matter, seating and corrosion at least once every three years.

24. Vapours displaced by the filling of petrol into vehicle petrol tanks at service stations shall be recovered through the use of [insert the technique selected by the operator and approved by the authority] vapour recovery system to the [specified storage installation] [see Section 6 of NIPG1/14(Version 3)]. Filling of vehicle petrol tanks shall not take place unless such a system is in place and fully functioning.

25. The vapour recovery system referred to in condition 24 shall be certified by the manufacturer to have a hydrocarbon capture efficiency of not less than 85% [see paragraph 5.16 and Section 8 of NIPG1/14(Version 3)]. Equipment used shall be approved for use under the regulatory regimes of at least one European Union or European Free Trade Association country.

26. The vapour recovery equipment referred to in Condition 24 shall be designed, installed and tested in accordance with the relevant British, European and international standards or national methods in place at the time that the equipment was installed.

27. The installation [has in place / does not have in place] an automatic monitoring system in accordance with condition 29.

28. Petrol delivery and vapour recovery systems for vehicle petrol tanks shall be tested in accordance with the manufacturer's specifications prior to commissioning and for:

- Vapour containment integrity at least once every three years, 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.
- Effectiveness of the vapour recovery system at least once [every three years where an automatic monitoring system is in place and every year in other cases].

[Insert condition (a) if an open active vapour recovery system is to be used or condition (b) if any other system is used (see Section 5.18 of the Note)]

[a. This shall be undertaken by measuring the ratio of the volume of vapour recovered to liquid petrol dispensed i.e. vapour/petrol (V/P) ratio. The V/P ratio shall be at least 95% and, where the vapours are recovered into the fuel storage tank, not greater than 105% to avoid excessive pressure build up and consequent release through the pressure relief valves. The V/P ratio shall be determined by simulating the dispensing of petrol using measuring equipment approved for

use in any European Union or European Free Trade Association country. The method to be used shall involve measuring the volume of air recovered with fuel flow simulated at the dispenser and read electronically using the approved measuring equipment. This provides the ratio of air recovered to liquid dispensed (air/liquid ratio) which should then be corrected to provide the V/P ratio using an appropriate factor to account for the difference in viscosity between petrol vapour and air ('k-factor').]

[b. In accordance with the manufacturer's specification with details of this testing retained with the service station log book.]

29. The automatic monitoring system referred to in condition 27 shall:

- Automatically detect faults in the proper functioning of the petrol vapour recovery system including the automatic monitoring system itself and indicate faults to the operator. A fault shall be deemed to be present where continuous monitoring during filling of vehicle petrol tanks indicates that the V/P ratio (condition 28) averaged over the duration of filling has fallen below 85% or has exceeded 115% for ten consecutive filling operations. This only applies to filling operations of at least 20 seconds duration and where the rate of petrol dispensed reaches at least 25 litres per minute.
- Automatically cut off the flow of fuel on the faulty delivery system if the fault is not rectified within 1 week.
- Be approved for use under the regulatory regime of at least one European Union or European Free Trade Association country.

30. [Insert if considered appropriate by the Regulator and agreed with the operator] The operator shall also undertake a weekly check to verify functionality of the system for recovery of vapours during filling of vehicle petrol tanks, including:

- A test of functionality of the vapour recovery system using appropriate equipment;
- An inspection for torn, flattened or kinked hoses and damaged seals on vapour return lines;

31. Operators shall be notified without delay if the results from any monitoring or tests mentioned in Conditions 28, 29 or 30 identifies adverse results, vapour recovery equipment failure or leaks if there is likely to be an effect on the local community, The operator should advise the regulator of the corrective measures to be taken and the timescales over which they will be implemented.

32. Effective preventative maintenance shall be employed on all aspects of the installation including all plant, buildings and the equipment concerned with the control of emissions to air. Preventative maintenance for all vapour recovery systems shall be carried out in accordance with the manufacturer's instructions

33. Spares and consumables needed shall be held on site, or should be available at short notice from guaranteed suppliers, so that plant breakdowns can be rectified rapidly.

34. The operator shall maintain a log book at the authorised premises incorporating details of all maintenance, examination and testing, inventory checking, installation and repair work carried out, along with details of training given to operating staff at the service station.

The log book shall also detail any suspected vapour leak together with action taken to deal with any leak, in accordance with Conditions 3, 4 and 5.

The operator shall record in the log book details of all maintenance; examination and testing; installation and repair work carried out on equipment for recovery of vapours during filling of vehicle petrol tanks. The operator shall also hold at the premises the certificate referred to in Condition 25 and the results of testing undertaken in accordance with Condition 28.

35. Venting of the petrol vapour shall be through the vent pipes marked [] on the attached plan reference []. [See paragraph 6.7 of NIPG1/14(Version 3)].

Signed: Date:

Explanatory Note

[To be inserted by the council as appropriate along with appeal provisions etc]

[The explanatory note should indicate that the general BAT condition is regarded as covering, among any other matters, the provision of sufficient training and practical instruction for service station operation staff; in order to enable them to carry out their duties in respect of using (or supervising the use of) and maintaining vapour collection controls, and the actions to be taken in the event of leak of vapour.]

Appendix 1: Extract from PPC Regulations

Definition of Gasification, Liquefaction and Refining Activities in Schedule 1 of the Pollution Prevention and Control Regulations (NI) 2003, 2003 No 46* as amended.

(The processes for district council air pollution prevention and control are listed under "Part C". The "Part A" and Part "B" processes are for Chief Inspector control.)

SECTION 1.2

GASIFICATION, LIQUEFACTION AND REFINING ACTIVITIES

Part A

- (a) Refining gas.
- (b) Reforming natural gas.
- (c) Operating coke ovens.
- (d) Coal or lignite gasification.
- (e) Producing gas from oil or other carbonaceous material or from mixtures thereof, other than from sewage, unless the production is carried out as part of an activity which is a combustion activity (whether or not that combustion activity is described in Section 1.1).
- (f) Purifying or refining any product of any of the activities falling within paragraphs (a) to (e) or converting it into a different product.
- (g) Refining mineral oils.
- (h) The loading, unloading or other handling of, the storage of, or the physical, chemical or thermal treatment of –
 - (i) crude oil;
 - (ii) stabilised crude petroleum;
 - (iii) crude shale oil;
 - (iv) where related to another activity described in this paragraph, any associated gas or condensate;
 - (v) emulsified hydrocarbons intended for use as a fuel.
- (i) The further refining, conversion or use (otherwise than as a fuel or solvent) of the product of any activity falling within paragraphs (g) or (h) in the manufacture of a chemical.
- (j) Activities involving the pyrolysis, carbonisation, distillation, liquefaction, gasification, partial oxidation, or other heat treatment of coal (other than the drying of coal), lignite, oil, other carbonaceous material or mixtures thereof otherwise than with a view to making charcoal.
- (k) Odourising natural gas or liquefied petroleum gas where that activity is related to a Part A Activity.

Interpretation of Part A

1. Paragraph (j) does not include the use of any substance as a fuel or its incineration as a waste or any activity for the treatment of sewage or sewage sludge.
2. In paragraph (j), the heat treatment of oil, other than distillation, does not include the heat treatment of waste oil or waste emulsions containing oil in order to recover the oil from aqueous emulsions.
3. In this Part, "carbonaceous material" includes such materials as charcoal, coke, peat, rubber and wood (but does not include wood which has not been chemically treated).

Part B

- (a) Odourising natural gas or liquefied petroleum gas, except where that activity is related to a Part A activity.

- (b) Blending odorant for use with natural gas or liquefied petroleum gas.
- (c) The storage of petrol in stationary storage tanks at a terminal, or the loading or unloading of petrol into or from road tankers, rail tankers or inland waterway vessels at a terminal, where the total quantity of petrol loaded from the stationary storage tanks into road tankers, rail tankers or inland waterway vessels in any 12 month period is likely to be equal to or greater than 10,000 tonnes.

Part C

- (a) The storage of petrol in stationary storage tanks at a terminal, or the loading or unloading of petrol into or from road tankers, rail tankers or inland waterway vessels at a terminal where the total quantity of petrol loaded from the stationary storage tanks into road tankers, rail tankers or inland waterway vessels in any 12 month period is likely to be less than 10,000 tonnes.
- (b) The unloading of petrol into stationary storage tanks at a service station, if the total quantity of petrol unloaded into such tanks at the service station in any period of 12 months is likely to be 100m³ or more.
- (c) Motor vehicle refuelling activities at existing service stations, if the petrol refuelling throughput at the service station in any period of twelve months commencing on or after 1st January 2007 is, or is likely to be, 3500m³ or more.
- (d) Motor vehicle refuelling activities at new service stations, if the petrol refuelling throughput at the service station in any period of twelve months is likely to be 500m³ or more.

Interpretation of Part C

1. In this Part –

“existing service station” means a service station—

- (a) which is put into operation; or
 - (b) for which planning permission under the Planning (Northern Ireland) Order 1991(a)(b) was granted,
- before 31st December 2009;

"inland waterway vessel" means a vessel, other than a sea-going vessel, having a total dead weight of 15 tonnes or more;

"new service station" means a service station which is put into operation on or after 31st December 2009 other than an existing service station

"petrol" means any petroleum derivative (other than liquefied petroleum gas), with or without additives, having a Reid vapour pressure of 27.6 kilopascals or more which is intended for use as a fuel for motor vehicles;

"service station" means any premises where petrol is dispensed to motor vehicle fuel tanks from stationary storage tanks;

"terminal" means any premises which are used for the storage and loading of petrol into road tankers, rail tankers or inland waterway vessels.

2. Any other expressions used in this Part which are also used in Directive 94/63/EC⁽⁴⁾ on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations have the same meaning as in that Directive.

*Every effort has been taken to ensure that this Appendix is correct at the date of publication, but readers should note that the Regulations are likely to be subject to periodic amendment, and this Appendix should not therefore be relied upon as representing the up to date position after the publication date