



Department
for Environment
Food & Rural Affairs

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Process Guidance Note 1/14(13)

Statutory guidance for unloading of petrol into storage, and motor vehicle refuelling, at service stations

December 2013



Llywodraeth Cymru
Welsh Government



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



Revision of the guidance

The electronic version of this publication is updated from time to time with new or amended guidance. **Table 0.1** is an index to the latest changes (minor amendments are generally not listed).

Table 0.1 - Revision of the guidance		

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1. Introduction

Legal basis

- 1.1 This note applies to the whole of the UK. It is issued by the Secretary of State, the Welsh Government, the Scottish Government and the Department of the Environment in Northern Ireland (DoE NI) 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 is published only in electronic form and can be found on the [Defra](#) website. It supersedes PG1/14(06) and NIPG 1/14(06).
- 1.2 This guidance document is compliant with the [Code of Practice on Guidance on Regulation](#) page 6 of which contains the "golden rules of good guidance". If you feel this guidance breaches the code or you notice any inaccuracies within the guidance, please [contact us](#).
- 1.3 This is one of a series of statutory notes giving guidance on the Best Available Techniques (BAT). The notes are all aimed at providing a strong framework for consistent and transparent regulation of installations regulated under the statutory Local Air Pollution Prevention and Control (LAPPC) regime in [England and Wales](#), [Scotland](#) and [Northern Ireland](#). The note will be treated as one of the material considerations when determining any appeals against a decision made under this legislation. Further guidance on the meaning of BAT can be found for [England and Wales](#), [Scotland](#), and [Northern Ireland](#).
- 1.4 In general terms, what are BAT for one installation in a sector are likely to be BAT for a comparable installation. Consistency is important where circumstances are the same. However, in each case it is, in practice, for regulators (subject to appeal) to decide what are BAT for each individual installation, taking into account variable factors such as the configuration, size and other individual characteristics of the installation, as well as the locality (e.g. proximity to particularly sensitive receptors).
- 1.5 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 Regulations or in Directions from the Government. In the case of this note, at the time of publication there were no such mandatory requirements.

- 1.6 Most of the activities covered by this note will have essentially the same characteristics and it is expected that the model permit and application form in **Appendices 1 and 2** will normally be used in order to simplify for business the process of applying for a permit and to simplify for regulators the process of issuing a permit. (See also the relevant LAPPC charging scheme for reduced application and subsistence charges for simplified permits).

Who is the guidance for?

- 1.7 This guidance is for:

Regulators

- local authorities in England and Wales, who must have regard to the guidance when determining applications for permits and reviewing extant permits;
- the Scottish Environment Protection Agency (SEPA) in Scotland, and district councils or the Northern Ireland Environment Agency (NIEA), in Northern Ireland;

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.

Updating the guidance

- 1.8 The guidance is based on the state of knowledge and understanding, at the time of writing, of what constitute BAT for this sector. The note may be amended from time to time to keep up with developments in BAT, including improvements in techniques, changes to the economic parameters, and new understanding of environmental impacts and risks. The updated version will replace the previous version on the [Defra](#) website and will include an index to the amendments.
- 1.9 Reasonable steps will be taken to keep the guidance up-to-date to ensure that those who need to know about changes to the guidance are informed of any published revisions. However, because there can be rapid changes to matters referred to in the guidance – for example to legislation – it should not be assumed that the most recent version of this note reflects the very latest legal requirements; these requirements apply.

Consultation

- 1.10 This note has been produced in consultation with relevant trade bodies, representatives of regulators including members of the Industrial Pollution Liaison Committee and other potentially-interested organisations.

Policy and procedures

- 1.11 General guidance explaining LAPPC and setting out the policy and procedures is contained in separate documents for [England and Wales](#), [Scotland](#) and [Northern Ireland](#).

2. Timetable for compliance and reviews

Existing processes or activities

- 2.1 This note contains all the provisions from previous editions which have not been removed. Some have been amended. For installations in operation at the date this note is published, the regulator should have already issued or varied the permit having regard to the previous editions. If they have not done so, this should now be done.
- 2.2 The new provisions of this note and the dates by which compliance with these provisions is expected are listed in **Table 2.1**, together with the paragraph number where the provision is to be found. Compliance with the new provisions should normally be achieved by the dates shown. Permits should be varied as necessary, having regard to the changes and the timetable.

Table 2.1 - Compliance timetable		
Guidance	Relevant paragraph/row in this note	Compliance date
A simple permit and application form have been added in Appendix 1 and Appendix 2 .		
For a full list of the main changes, please see Table 6.1 in Section 6.		

- 2.3 Replacement plant should normally be designed to meet the appropriate standards specified for new installations/activities.
- 2.4 Where provisions in the preceding guidance note have been deleted or relaxed, permits should be varied as necessary as soon as reasonably practicable. It is expected that local authorities will aim to vary existing permits so as to convert them into the model permit format in **Appendix 1** within 12 months of the publication of this note.
- 2.5 For new activities, the permit should have regard to the full standards of this guidance from the first day of operation.
- 2.6 For substantially changed activities, the permit should normally have regard to the full standards of this guidance with respect to the parts of the activity that have been substantially changed and any part of the activity affected by the change, from the first day of operation.

Permit reviews

- 2.7 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 eight years ought normally to be sufficient for the purposes of the appropriate Regulations. Further guidance on permit reviews is contained in the appropriate Guidance Manual for [England and Wales](#) chapter 26, [Scotland, Practical guide](#) section 10, Northern Ireland [Part B Guidance](#) page 9, Northern Ireland [Part C Guidance](#) chapter 17. Regulators should use any opportunities to determine the variations to permits necessitated by paragraph 2.2 above in conjunction with these reviews.
- 2.8 Conditions should also be reviewed where complaint is attributable to the operation of the process and is, in the opinion of the regulator, justified.

3. Activity description

Regulations

- 3.1 This note applies to LAPPC installations for the unloading of petrol into storage, and motor vehicle refuelling, at service stations. The activities for regulation are listed in **Table 3.1**. (Initial filling of new vehicles at vehicle construction sites is a specifically excluded activity).

Table 3.1 - Regulations listing activities			
LAPPC Activity	England and Wales	Scotland	Northern Ireland
	EPR Schedule 1 reference	PPC Schedule 1 reference	PPC Schedule 1 reference
Part B	Section 1.2 Part B	Section 1.2, Part B	n/a
Part C	n/a	n/a	Section 1.2 Part C

The links are to the original version of the Regulations. A consolidated version is not available on www.legislation.gov.uk

For England and Wales, an [unofficial consolidated version](#) is available but read the first page of that document in order to understand its status and content.

- 3.2 The Petroleum Licensing Authority (PLA) must be notified of an application for a permit for a service station. The Petroleum Licensing Authority is the local authority empowered to grant petroleum spirit licences under the Petroleum (Consolidation) Act 1928.
- 3.3 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. 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.
- 3.4 The control of emissions associated with the unloading into storage of petrol at service stations from mobile containers is termed "Stage 1 controls". The term "mobile container" in the context of this note means "road tanker".
- 3.5 The unloading of petrol into the tanks may be either directly from the road tanker or via an off-set filling pipe. There are emissions associated with the escape of petrol vapour displaced when storage tanks are filled.

- 3.6 Deliveries of petrol can occur at any time and may occur outside normal operating hours. Deliveries which take place outwith normal operating hours are controlled directly by the road tanker driver.
- 3.7 It should be noted that the term "service station" 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

- 3.8 There are petrol vapour emissions associated with the filling of vehicle petrol tanks at service stations. Controls for abating such emissions are termed "Stage II controls".
- 3.9 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 – from 2018 the throughput value becomes 3000m³. 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.
- 3.10 Service stations that have a throughput of 500m³ in any 12-month period which undergo major refurbishment are required to fit Stage II controls.
- 3.11 Major refurbishment is defined as;
- Works which provide a cost-effective opportunity to install Stage II controls.
 - Excavation of a forecourt to replace pipework and dispensers.
 - Staged replacement of dispensers and pipework should be treated as one refurbishment with Stage II controls fitted during the second refurbishment.
- 3.12 Work which is unlikely to constitute major refurbishment covers:
- Refurbishment of buildings.
 - Repair or replacement of a section of pipework.
 - Replacement of one or more dispensers without any other works.

4. Emission limits, monitoring and other provisions

Stage I controls

- 4.1 Stage 1 controls are required to reduce the total annual loss of petrol resulting from unloading into storage installations in service stations to below a target reference value of 0.01% by weight of the throughput.
- 4.2 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 or to dedicated vapour abatement plant. Unloading operations may not take place unless the arrangements are in place and properly functioning.
- 4.3 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 orifice vent device.
- 4.4 Petrol delivery and vapour return lines should be tested prior to operation and vapour return lines every 5 years, for vapour containment integrity.
- 4.5 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.
- 4.6 The operators should maintain a log book at the permitted installation 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.
- 4.7 A competent person should remain near the tanker during unloading. A competent person is one who has received training for deliveries. (Delivery drivers will normally be trained as the competent person.)
- 4.8 The log book should also detail any suspected vapour leaks together with action taken to deal with any leak.
- 4.9 All reasonably practicable steps should be taken to prevent uncontrolled leaks (meaning any leak excepting those which occur through the orifice vent device) of vapour from vents, pipes and connectors from occurring.
- 4.10 The regulator should be advised without delay of the circumstances of such a vapour leak if there is likely to be an effect beyond the site boundary, and in all cases such a vapour leak should be recorded in the log book. The operator should advise the regulator of the corrective measures to be taken and the timescales over which they will be implemented.

- 4.11 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

- 4.12 Filling of vehicle petrol tanks at service stations with a throughput of more than 3500m³ of petrol per year for existing service stations – from 2018 the throughput value becomes 3000m³ or 500m³ of petrol per year for new or refurbished service stations is a prescribed activity.
- 4.13 The vapour recovery equipment is designed to ensure recovery of at least 85% but not more than 115% of the displaced petrol vapours resulting from filling of vehicle petrol tanks in service stations.
- 4.14 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.
- 4.15 The vapour recovery system 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% or more than 115% determined through the aforementioned type approval test.
- 4.16 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 available in member states (for example in Germany VDI 4205) and, at the time of drafting this note, a CEN Std methodology is under final development.
- 4.17 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 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%. 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.

4.18 Operators should either install an automatic monitoring system or ensure a greater frequency of other regular testing as per manufacturer's instructions.

4.19 An automatic monitoring system 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.

4.20 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 4.1**.

Table 4.1 - Frequency of monitoring for different vapour recovery systems	
Type of system	Tests required (post-commissioning)
Active system with automatic monitoring	Vapour containment integrity = 3 years Vapour recovery effectiveness (V/P ratio) = 3 years
Active system without 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)

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

4.22 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.

4.23 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.

4.24 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.

5. Control techniques

Summary of best available techniques

Stage I controls

- 5.1 Vapour collection systems should be sized and designed to minimise vapour emission occurring during the maximum petrol and vapour flow (i.e. when the maximum number of tanker compartments are being simultaneously discharged).
- 5.2 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. The PLA (petroleum licensing authority) may also place restrictions on the number of compartments which are allowed to be discharged at any one time irrespective of the capacity of the vapour recovery systems capacity.
- 5.3 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.
- 5.4 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.
- 5.5 The fittings for delivery and vapour return pipes should be different to prevent misconnection.
- 5.6 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 12mm orifice plate (OVD). 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.
- 5.7 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.
- 5.8 When connecting hoses prior to delivery of petrol or mixed loads of petrol and diesel, 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. If diesel only is delivered to storage tanks which are not manifolded with petrol tanks then a vapour recovery line is not required.

- 5.9 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; **or**
 - b) a clear statement of the maximum number of tanker compartments which may be unloaded simultaneously should be included on the Petroleum Delivery Form, whichever is preferred by the operator.
- 5.10 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.
- 5.11 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.
- 5.12 All road tanker compartment vent and discharge valves should be closed on completion of the delivery.
- 5.13 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.
- 5.14 All connection points should be securely sealed after delivery.
- 5.15 If the storage tanks or road tanker compartments are dipped after delivery, the dip openings should be securely sealed immediately after dip testing.
- 5.16 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

- 5.17 Vapour recovery systems for filling of vehicle petrol tanks should be designed to minimise vapour emission occurring during filling of vehicle petrol.
- 5.18 Operators should not be constrained as to the specific techniques to be used in recovery of vapours during filling of vehicle petrol tanks. Examples of techniques that can be used are provided below. In all cases, however, appropriate approval of the equipment should be ensured.

Open active vapour recovery with return of vapours to underground storage tank

- 5.19 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.
- 5.20 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).
- 5.21 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

- 5.22 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

- 5.23 '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. (Passive vapour recovery is currently not widely used in the UK).

General remarks

- 5.24 The above descriptions do not preclude use of any other equipment, provided that the minimum hydrocarbon capture efficiency requirements (85% / 115%) are met (as determined under type approval tests).
- 5.25 Under no circumstances should the vapour return line be manifolded to any diesel tanks present.

Air quality

Ambient air quality management

- 5.26 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 permitted process itself is a significant contributor to the problem, it may be necessary to impose tighter emission limits. If the 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 local authority's Local Air Quality Management action plan. For example, where a permitted process is only responsible to a very small extent for an air quality problem, the authority should not unduly penalise the operator of the process by requiring disproportionate emissions reductions. Paragraph 59 of the [Air Quality Strategy 2007 \[Volume 1\]](#) gives the following advice:

"...In drawing up action plans, local authority environmental health/pollution teams are expected to engage local authority officers across different departments, particularly, land-use and transport planners to ensure the actions are supported by all parts of the authority. In addition, engagement with the wider panorama of relevant stakeholders, including the public, is required to ensure action plans are fit-for-purpose in addressing air quality issues. It is vital that all those organisations, groups and individuals that have an impact upon local air quality, buy-in and work towards objectives of an adopted action plan."

Management

Management techniques

5.27 Important elements for effective control of emissions include:

- proper management, supervision and training for process operations;
- proper use of equipment;
- effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air.

Training

5.28 Staff at all levels need the necessary training and instruction in their duties relating to control of the process and emissions to air. In order to minimise risk of emissions, particular emphasis should be given to control procedures during abnormal conditions.

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

- awareness of their responsibilities under the permit;
- actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions;
- the operator should maintain a statement of training requirements for each post with the above mentioned functions and keep a record of the training received by each person. These documents should be made available to the regulator on request.

Maintenance

5.29 Effective preventative maintenance plays a key part in achieving compliance with emission limits and other provisions. All aspects of the process including all plant, buildings and the equipment concerned with the control of emissions to air should be properly maintained. In particular:

The operator should have the following available for inspection by the regulator:

- a written maintenance programme for all pollution control equipment; **and**
- a record of maintenance that has been undertaken.

6. Summary of changes

The main changes to this note, with the reasons for the change, are summarised in **Table 6.1**. Minor changes that will not impact on the permit conditions e.g. slight alterations to the Process Description have not been recorded.

Table 6.1 - Summary of changes			
Section/ paragraph/ row	Change	Reason	Comment
Section 3	Remove reference to outdated regulations	Clarification	Prevent confusion
Section 4	Remove reference to outdated regulations	Clarification	Prevent confusion
Section 5	Remove reference to outdated regulations	Clarification	Prevent confusion

7. Further information

Sustainable consumption and production (SCP)

Both business and the environment can benefit from adopting sustainable consumption and production practices. Estimates of potential business savings include:

- £6.4 billion a year UK business savings from resource efficiency measures that cost little or nothing;
- 2% of annual profit lost through inefficient management of energy, water and waste;
- 4% of turnover is spent on waste.

When making arrangement to comply with permit conditions, operators are strongly advised to use the opportunity to look into what other steps they may be able to take, for example, having regard to the efficient use of auxiliary fuels, such as gas and electricity. Regulators may be willing to provide assistance and ideas, although cannot be expected to act as unpaid consultants.

Health and safety

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

- requirements of a permit should not put at risk the health, safety or welfare of people at work or those who may be harmed by the work activity;
- equally, the permit 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 relevant environmental legislation 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 a process is breathed by workers). In such cases, the tighter limit should be applied to prevent a relaxation of control.

Further advice on responding to incidents

The UK Environment Agencies have published [guidance](#) on producing an incident response plan to deal with environmental incidents. Only those aspects relating to air emissions can be subject to regulation via a Part B (Part C in NI) permit, but regulators may nonetheless wish to informally draw the attention of all appropriate operators to the guidance.

It is not envisaged that regulators will often want to include conditions, in addition to those advised in this PG note, specifying particular incident response arrangements aimed at minimising air emissions. Regulators should decide this on a case-by-case basis. In accordance with BAT, any such conditions should be proportionate to the risk, including the potential for harm from air emissions if an incident were to occur. Account should therefore be taken of matters such as the amount and type of materials held on site which might be affected by an incident, the likelihood of an incident occurring, the sensitivity of the location of the installation, and the cost of producing any plans and taking any additional measures.

Appendix 1 - Model Permit

This Appendix contains a model permit for unloading petrol into storage at petrol stations and filling of vehicle petrol tanks – see [insert relevant para from introduction] of this note and paragraph 3.6 of the [General Guidance Manual on Policy and Procedures](#).

Notes:

- text in the model permit written in *italics* is advice to regulators.
- text in the model permit in [square brackets] offers choice to regulators or indicates where information needs to be inserted from the application;
- text bracketed with asterisks (eg *Alarms shall be tested at least once a week*.) may be omitted by a regulator where the past performance of the plant gives the local authority sufficient reassurance about operator compliance - “earned recognition”;
- the model permit has been drafted for local authorities in England and Wales. Regulators in Scotland and Northern Ireland will need to amend the legal heading and, where appropriate, references to ‘Council’;
- references to ‘installation’ will need to be substituted with ‘mobile plant’ in relevant cases, and other amendments made accordingly;
- the purpose of the activity description is to set down the main characteristics of the activity, including any directly associated activities, so it is clear to all concerned what is being authorised by the permit and therefore what changes would need further approval. Regulators are advised to include a description of any key items of abatement and monitoring equipment the operator intends to use or is using;
- it should normally be sufficient for records relating to simplified permits to be kept for no more than [24] months. Where, however, as a result of a ‘low risk’ rating, inspections are undertaken less often, regulators may want to specify a period which ensures the records are available at the next inspection.

[] COUNCIL
POLLUTION PREVENTION AND CONTROL ACT 1999
Environmental Permitting Regulations 2010 (as amended)

Permit ref. no:

Name and address of person (A) authorised to operate the installation or mobile plant:

Registered number and office of company: (if appropriate)

Address of permitted installation (B)

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

Activity description

[The purpose of the description is to set down the main characteristics of the activity, including any directly associated activities, so it is clear to all concerned what is being authorised and therefore what changes would need further approval. Authorities are advised to include a description of any key items of arrestment and monitoring equipment the operator intends to use or is using. E.G:- The unloading of petrol into stationary storage tanks at a service station. The stationary technical unit comprises the following: - Storage Tanks: - Tank 1, Volume xxm^3 , Tank 2, Volume xxm^3 etc. Delivery and vapour return hoses, Vapour recovery system, and Tank vapour release point all as described in the site plan.]

Conditions

The person (A) is authorised to operate the activity¹ at the installation (B) subject to the following conditions.

Petrol Delivery

1. Vapours displaced by the delivery of petrol into storage tanks shall be returned through a vapour-tight connection line to either the mobile container delivering the petrol or a container on the site.
2. Petrol delivery shall only be carried out using the [Stage I] petrol vapour recovery system and deliveries shall only be made when the system is fully operational.

Motor Vehicle Refuelling

3. Motor vehicle refuelling with petrol shall only take place when the [Stage II] petrol vapour recovery system is fully operational and operating in accordance with the requirements of Condition 4.
4. The petrol vapour capture efficiency of the [Stage II] petrol vapour recovery system shall be equal to or greater than 85% but less than 115% as certified by the manufacturer in accordance with relevant European technical standards or type approval procedures.
5. Where the recovered petrol vapour is transferred to a storage tank, the vapour/petrol ratio shall be equal to or greater than 0.95 but less than or equal to 1.05.
6. Where an automatic monitoring system has been installed, the petrol vapour capture efficiency shall be tested and the results recorded at least once every three years by checking that the vapour/petrol ratio under simulated petrol flow conditions, or by any other appropriate methodology. Any such automatic monitoring system shall automatically detect faults in the proper functioning of the [Stage II] petrol vapour recovery system and in the automatic monitoring system itself, indicate faults to the operator and automatically stop the flow of petrol from any faulty dispenser if the fault is not rectified within seven days.
7. Where automatic monitoring systems have not been installed the in-service petrol vapour capture efficiency of the [Stage II] petrol vapour recovery systems shall be tested the results recorded at least once a year by checking that the vapour/petrol ratio under simulated petrol flow conditions, or by any other appropriate methodology.
8. Where automatic monitoring systems have not been installed a *weekly functionality check* shall be undertaken to verify the operation of the vapour recovery system.
9. A sign, sticker or other notification shall be displayed on, or in the vicinity of, the petrol dispenser, informing consumers that a [Stage II] petrol vapour recovery system is in use.

Incident Reporting

10. In the event of any incident at the site which could have an impact beyond the site boundary, the operator shall notify Council by telephone without delay on xxxxxxxxx

¹ listed in [] in Part 2 of Schedule 1 to the Environmental Permitting Regulations
PG1/14 (13)

Management

11. A copy of this permit shall be kept at the permitted installation. All staff who should be aware of its content shall be told where it is kept.
12. All relevant staff shall receive the necessary training and instruction to enable them to comply with the conditions of this permit.
13. The operator shall notify the Council of any changes to the persons nominated in the application as the primary point of contact, and deputy.
14. Maintenance and testing of vapour recovery systems shall be recorded.
15. All records made in compliance with this permit shall be kept in a written or computer log book or by using some other systematic method, and shall be clear and legible. If any entry is amended, a clear statement of the reason for doing so shall be included. Unless otherwise stated in this permit, all records required to be taken shall be kept available for inspection for at least 4 years from the date of its being made. A copy of the manufacturer's instructions referred to in this permit shall be available for inspection on request.

Best available techniques

16. The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit.

Process changes

17. If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

Right to appeal

You have the right of appeal against this permit within 6 months of the date of the decision. The Council can tell you how to appeal [*or supply details with the permit*]. You will normally be expected to pay your own expenses during an appeal.

You will be liable for prosecution if you fail to comply with the conditions of this permit. If found guilty, the maximum penalty for each offence if prosecuted in a Magistrates Court is £50,000 and/or 6 months imprisonment. In a Crown Court it is an unlimited fine and/or 5 years imprisonment.

Our enforcement of your permit will be in accordance with the [Regulators' Compliance Code](#)

Appendix 2 - Application form

Application for a permit for unloading petrol into storage at petrol stations and filling of vehicle petrol tanks

Local Authority Pollution Prevention and Control
Pollution Prevention and Control Act, 1999
Environmental Permitting (England and Wales) Regulations 2010

Introduction

When to use this form

Use this form if you are applying for a permit to a Local Authority to operate an installation unloading petrol into storage at petrol stations and filling of vehicle petrol tanks.

The appropriate fee must be enclosed with the application to enable it to be processed further. When complete, send the form and the fee and any additional information to:

[Insert local authority address]

If you need help and advice

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

For the purposes of Section G of the form, a relevant offence is any conviction for an offence relating to the environment or environmental regulation.

For Local Authority use

Application reference	Officer reference	Date received

LAPPC application form - to be completed by the operator

A The basics

A1 Name and address of the installation

Postcode:	Telephone:
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A2 Details of any existing environmental permit or consent

(for waste operations, include planning permission for the site, plus established use certificates, a certificate of lawful existing use, or evidence why the General Permitted Development Order applies.)

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A3 Operator details

(The 'operator' = the person who it is proposed will have control over the installation in accordance with the permit (if granted).)

Name:
Trading name, if different:
Registered office address:
Principal office address, if different:
Company registration number:

A4 Any holding company?

Is the operator a subsidiary of a holding company within the meaning of section 1159 of the Companies Act 2006? If "yes" please fill in details of the ultimate holding company.

Yes No

Name: Trading name, if different:
Registered office address: Principal office address, if different:
Company registration number:

A5 Who can we contact about your application?

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

Name and position: _____
Telephone: _____
Email: _____

B The installation

B1 What activities are or will be carried on at the installation? Please include “directly associated activities” – this term is explained in Annex III in Part B of the [general guidance manual](#).

B2 Why is the application being made?

- new installation
- change to existing installation means it now needs a permit

B3 Site maps – please provide:

A location map with a red line round the boundary of the installation

Document reference: _____

A site plan or plans showing where all the relevant activities are on site:

- a) the location of the fill points
- b) the buildings/structures
- c) the location of the petrol dispensers
- d) the height and location of the vent pipes
- e) the number, capacity and location of all storage tanks

Document reference: _____

B4 Technical documentation – please provide:

- a) Copy of “type approval” certificate where a site operates Stage II activities

C The details

C1 Which of the following vapour monitoring systems will be in use?

- a) active system with automatic monitoring (tick relevant)
- b) active system without automatic monitoring

C2 Do you have environmental management procedures and policy?

Yes No

If yes, please supply a copy.

C3 Are there any sites of special scientific interest (SSSIs) or European protected sites nearer than 500m to the proposed installation?

Yes No

If 'yes', is the installation likely to have a significant effect on the special scientific interest or European protected sites?

Yes No

If 'yes', please write on a separate sheet or enclose a relevant document explaining what the implications are for the purposes of the Conservation (Natural Habitats etc) Regulations 1994 (see appendix 2 of Annex XVII of the [general guidance manual](#))

Document reference: _____

C4 Will emissions from the activity potentially have significant environmental effects (including nuisance)?

Yes No

If 'yes', please list the potential significant local environmental effects (including nuisance) of the foreseeable emissions on a separate document.

Document reference: _____

If 'yes', please enclose a copy of any environmental impact assessment which has been carried out for the installation under planning legislation or for any other purpose.

Document reference: _____

C5 Is the proposed installation sited under living quarters?

Yes No

D Anything else?

Please tell us of anything else you would like us to take account of:

Document reference: _____

E Application fee

You must enclose the [relevant fee](#) with your application.

If your application is successful you will also have to pay an annual subsistence charge, so please say who you want invoices to be sent to.

Name and position:

Telephone:

Email:

F Protection of information

F1 Any confidential or national security information in your application?

If there is any information in your application you think should be kept off the public register for confidentiality or national security reasons, please say what and why. General guidance manual chapter 8 advises on what may be excluded. *(Do not include any national security information in your application. Send it, plus the omitted information, to the Secretary of State or Welsh Ministers who will decide what, if anything, can be made public.)*

Document reference : _____

F2 Please note: 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;
- make sure you keep to the conditions of your permit and deal with any matters relating to your permit;
- investigate possible breaches of environmental law and take any resulting action;
- prevent breaches of environmental law;
- offer you documents or services relating to environmental matters;
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004; (if the Data Protection Act allows)
- assess customer service satisfaction and improve our service.

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

F3 Please note: it is an offence to provide false information

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

- make a false statement which you know to be false or misleading in a material particular;
- recklessly make a statement which is false or misleading in a material particular;
- intentionally to make a false entry in any record required to be kept under any environmental permit condition;
- with intent to deceive, to forge or use a document issued or required for any purpose under any environmental permit condition.

If you make a false statement:

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

G Declarations A and B for signing, please

These declarations should be signed by the person listed in answer to question A3. Where more than one person is identified as the operator, all parties should sign. Where a company or other body corporate is the operator, an authorised person should sign and provide evidence of authority from the board.

Declaration A: I/We certify

EITHER - As evidence of my/our competence to operate this installation in accordance with the EP Regulations, no offences have been committed in the previous five years relating to the environment or environmental regulation.

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

Signature: _____ Name: _____

Position: _____ Date: _____

Declaration B:

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 the listed 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.)

Signature: _____ Name: _____

Position: _____ Date: _____

Signature: _____ Name: _____

Position: _____ Date: _____

Signature: _____ Name: _____

Position: _____ Date: _____