



<b>Operator</b>	<b>ASDA Stores Limited</b>
<b>Installation Address</b>	<b>Asda Telford Petrol Filling Station Grange Central Shropshire Telford TF3 4AE</b>
<b>Grid Reference</b>	<b>SJ 701088</b>
<b>Registered Office</b>	<b>ASDA House South Bank Great Wilson Street Leeds LS11 5AD</b>
<b>Registered Number</b>	<b>00464777</b>

ASDA Stores Limited is hereby permitted by the Borough of Telford and Wrekin to carry on a unloading of petrol into stationary storage tanks and filling of vehicle petrol tanks activity at the service station under section 1.2, part B, of Schedule 1 of The Environmental Permitting (England and Wales) Regulations 2007 (as amended), as listed and as described below within the installation boundary as marked red on the attached plan referenced Appendix 1 and in accordance with the following conditions.

<b>Provenance</b>	<b>Relevant Dates</b>
Date Application Made (Deemed application)	14.04.2005
Date 'Duly Made'	N/A
Date Permit First Issued	14.04.2005
Date of Variations	22.12.2009
Date of Variations	21.01.2010
Date of Latest Variation	21.01.2010

This permit consists of 15 numbered pages

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## **Description of the Installation**

### **Stage I Controls**

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, but in the context of this note means "road tanker". The description of prescribed service stations (and their time-scales for coming into control) are set out in the Environmental Permitting (England and Wales) Regulations 2007 (as amended)

The unloading of petrol into the tanks may be either directly from the road tanker or via an off-set filling pipe.

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".

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.

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**

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 SI 2006, No. 2311.

## Potential Releases

For the purposes of the Environmental Permitting (England and Wales) Regulations 2007 (as amended) petrol vapours from installations intended for the sale of motor vehicles require control.

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

**ASDA Stores Limited** are 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 **5** storage tanks, **24** nozzles dispensing petrol and contains the following permitted equipment only (See table 1):

Make	Equipment	Date of Installation
Burkert & ASF Thomas	Stage II Vapour Recovery System (Open active vapour recovery to underground storage)	21/08/2009
Gilbarco VMC	Stage II Vapour Recovery Monitoring System	21/08/2009
Gilbarco Euroline SM	Stage II Vapour Recovery Dispenser/Pump	21/08/2009
ELAFLEX ZVA 200 GR	Stage II Vapour Recovery Fuel-hose nozzle	21/08/2009
ELAFLEX Conti Slimline 21/8 Coax	Stage II Vapour Recovery Hose	21/08/2009
Burkert 6022 / 2832,	Stage II Vapour Recovery Control Valve	21/08/2009
ASF Thomas, Typ8014-1, 8014-5.0	Stage II Vapour Recovery pump	21/08/2009

**Table 1:** Permitted equipment on site **Asda Stores Limited 07/00041/PFS**

Subject to compliance with the following conditions:

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## Permit 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 as stated in document referenced 2 provided as part of the application for authorisation/permit dated 28<sup>th</sup> August 2009 (**See Appendix 3**).
- 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 23. 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 10 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 23 to 26 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 number of tanker compartments being discharged simultaneously shall not exceed 2, excluding the diesel compartment[s].
- 8) 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.
- 9) The fittings for delivery and vapour return pipes shall be different to prevent mis-connection.



- 10) Petrol storage tank vent pipes shall be fitted with a pressure vacuum relief valve 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.
- 11) 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.
- 12) 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 7.
- 13) 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.
- 14) Road tanker compartment dip testing shall not be performed whilst the vapour hose is connected.
- 15) 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 PG1/14(06).
- 16) All road tanker compartment vent and discharge valves shall be closed on completion of the delivery.
- 17) 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.
- 18) All connection points shall be securely sealed after delivery.
- 19) If the storage tanks or road tanker compartments are dipped after delivery, the dip openings shall be securely sealed after dip testing.
- 20) 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.

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- 21) Petrol delivery and vapour return lines shall be tested in accordance with the schedule as stated in document referenced 4 provided as part of the application for authorisation dated 28<sup>th</sup> August 2009 (**See Appendix 4**).
  - 22) Pressure vacuum relief valves on petrol storage tank vents shall be checked for correct functioning, including extraneous matter, seating and corrosion at least once every three years.
  - 23) Vapours displaced by the filling of petrol into vehicle petrol tanks at service stations shall be recovered through the use of open active vapour recovery to underground storage. Filling of vehicle petrol tanks shall not take place unless such a system is in place and fully functioning.
  - 24) The vapour recovery system referred to in condition 23 shall be certified by the manufacturer to have a hydrocarbon capture efficiency of not less than 85%. Equipment used shall be approved for use under the regulatory regimes of at least one European Union or European Free Trade Association country.
  - 25) The vapour recovery equipment referred to in Condition 23 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.
  - 26) The installation has in place an automatic monitoring system in accordance with condition 28.

27) 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.

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').

29) The automatic monitoring system referred to in condition 26 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 27) 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.



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- 30) 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:
- An inspection for torn, flattened or kinked hoses and damaged seals on vapour return lines;
- 31) The operator shall notify the regulator without delay if the result from any monitoring or tests mentioned in Conditions 27, or 28 or 28 identifies adverse results, vapour recovery equipment failure or leaks if there is likely to be an effect on the local community, the operator shall also 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 24 and the results of testing undertaken in accordance with Condition 27.
- 35) Venting of the petrol vapour shall be through the vent pipes marked in pink on the attached plan reference 1 (**See Appendix 2**).



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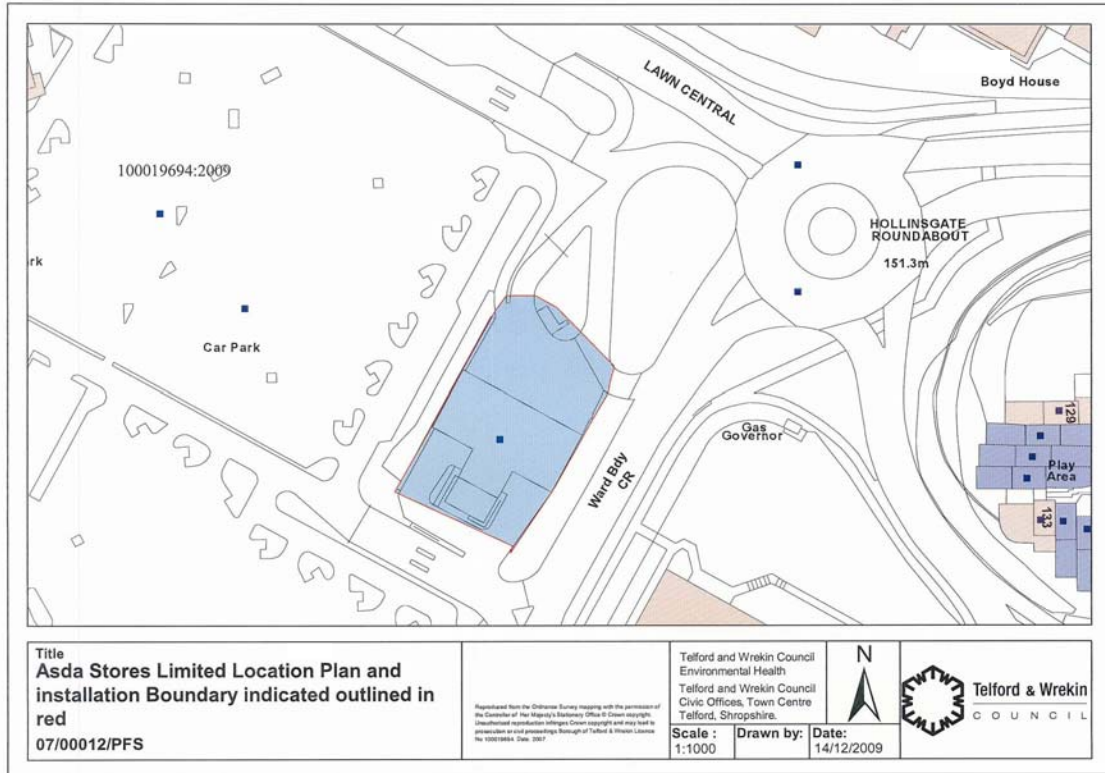
**In relation to this Permit any reference the local Authority or the Regulator shall mean the Borough of Telford and Wrekin. Any information required by this permit to be sent to the Local Authority shall be sent to:**

**Environmental Health  
Telford & Wrekin Council,  
Darby House,  
PO Box 214  
Telford  
TF3 4LE**

**Signed..... Dated: 21<sup>st</sup> January 2010**

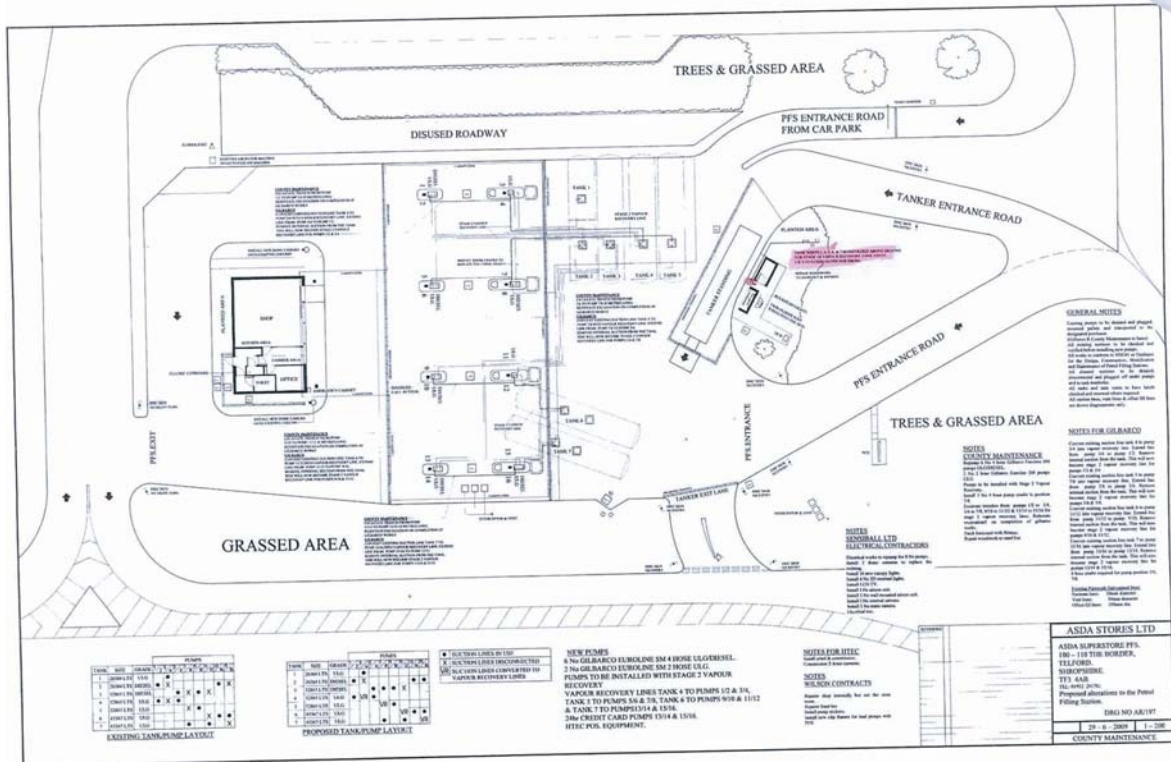
**Warren Dews  
Environmental Health Officer  
Officer authorised for that purpose**

**Appendix 1: Location Plan and Installation Boundary**



**ASDA Stores Limited 07/00012/PFS  
Location Plan and installation Boundary**

**Appendix 2: Site Layout Plan**



**ASDA Stores Limited 07/00012/PFS  
Site Layout Plan**



**Appendix 3: Schedule of maintenance**  
**ASDA Stores Limited 07/00012/PFS**

**VAPOUR RECOVERY - SCHEDULE OF MAINTENANCE & SCHEDULE OF INSPECTION**

**STAGE 1B**

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To meet the requirements in Defra PGN 1.14 (06)

**ANNUAL**

Visual inspection of:

- a) Fill pipe adaptors and caps. Replace as required.
- b) Vapour connection point, including condition of adaptor, poppet valve and dust cover. Replace as required
- c) Position and clarity of safety notice. Replace as required
- d) Emission control valve. Clean/check flame arrestors and gauzes

**EVERY 3 YEARS**

As per annual inspection plus:

- a) Replace emission control valve with new certified unit to meet pressure and vacuum settings.

**EVERY 5 YEARS**

As per annual inspection plus:

- a) Testing of all fill pipes, vapour return line(s) and vents.
- b) Visual inspection of non return ball valves on vapour manifold (if applicable). Clean and check operation

**STAGE 2 - Pump/Dispenser**

As pumps are fitted with Automatic monitoring system tested and approved to Merkblatt 1 standard there is no requirement for weekly checks or annual tests as specified in Defra PGN 1.14(06)

**EVERY 3 YEARS**

- a) Vapour containment integrity test
- b) Vapour recovery effectiveness (V/P ratio)
- c) Monitoring system test - disables petrol nozzles affected

**Appendix 4: Schedule of testing for petrol delivery/vapour return lines**  
**ASDA Stores Limited 07/00012/PFS**

Answer to B2.6

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TEM Box - Two Wire Electronic Monitor installed which monitors any alarm from the pumps when the vapour collection falls below the legal tolerance (10 continuous transactions with a capture rate of less than 85%)

Once an alarm is picked up, a message is sent to the tank gauge which informs the Fuel Management System at Gilbarco. An engineer will then attend site within 7 days to resolve the issue, if engineer fails to attend and rectify problem within this timescale pump automatically switches off.

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### **Glossary of Terms/Definitions:**

Activity	One or more stationary technical units falling within the defined sections of the Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2007
Installation	One or more stationary technical units comprising at least one activity or activities falling within the description of Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2007 within a defined area.
EPR	Environmental Permitting Regulations, the new pollution control regime replacing that under PPC.
Regulator	Means the Pollution Control Section of the Telford & Wrekin Council. When contacting the regulator it is not sufficient to contact any other part of the council other than the Pollution Control Section at the address specified in the additional notes or at the telephone numbers provided.
Petrol	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). In addition the Government's view is that the definition of petrol 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 Government'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.

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.</p> <p>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.

Vapour lock

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:

- 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.
- 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.

## **ADDITIONAL NOTES**

**These notes do not comprise part of the permit, but contain guidance relevant to it.**

### **Inspections**

Regular inspections will be made by officers of Telford & Wrekin Council (without prior notice), in order to check and ensure full compliance with this permit.

### **BAT (Best Available Techniques)**

Article 2(11) of the IPPC Directive defines “best available techniques” as follows:

*“the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent, and where that is not practicable, generally to reduce emissions and the impact on the environment as a whole”.*

- “techniques” shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned,
- “available” techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector , under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator,
- “best” shall mean most effective in achieving a high general level of protection if the environment as a whole.

In determining the best available techniques, special consideration should be given to the items listed in Annex IV of the Directive.

### **Health and Safety at Work and Other Statutory Requirements**

Compliance with this permit does not necessarily infer compliance with any other legislation.



### **Other Statutory requirements**

This permit, in that it regulated only air pollution matters, does not absolve you of the responsibility of any other statutory requirement, such as any need to obtain planning permission, hazardous substances consent or Building Regulations approval from the Council. Discharge consents from the local sewerage undertaker or a waste disposal licence from the Environment Agency may still be required as will compliance with health and safety legislation.

### **Notification of Operation Changes**

The operator may be liable to prosecution if they operate otherwise than in accordance with the conditions and plant described in this permit.

The operator should contact the regulator to discuss any proposed changes.

### **Enforcement**

The operator will be liable to enforcement action where: -

1. the operator fails to comply with or contravenes any permit condition;
2. a change is made to the installation operation without prior notification of the change to the regulator;
3. intentional false entries are made in any record required to be kept under the conditions of the permit;
4. a false or misleading statement is made.

Any enforcement action is taken in accordance with the regulator's enforcement policy.

<http://www.telford.gov.uk/NR/rdonlyres/240C3F4A-8E36-4C12-8311-E4E57A3DF8CC/26214/MicrosoftWordEnvironmentalHealthandWellbeingEnf orc.pdf>

### **Annual Subsistence Charge**

A subsistence charge is payable on the 1<sup>st</sup> April each year. An invoice will be issued by the regulator providing further details of how to pay. The charges are based on a risk based system. Details of the risk assessment can be found at <http://www.defra.gov.uk/environment/ppc/localauth/fees-risk/risk.htm>

## **Appeal against Regulatory Action**

The operator can appeal against regulatory action by the regulator to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be sent to the Secretary of State on a form found at

[http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental\\_appeals/environmental\\_permitting\\_appeal\\_form.pdf](http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental_appeals/environmental_permitting_appeal_form.pdf)

Guidance on the appeal procedure can be found at

[http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental\\_appeals/environmental\\_permitting\\_guidance\\_notes.pdf](http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental_appeals/environmental_permitting_guidance_notes.pdf)

There are time limits for making an appeal as follows:

- a) in relation to an appeal against a revocation notice, before the notice takes effect;
- b) in relation to the withdrawal of a duly-made application under paragraph 4(2) of Schedule 5, not later than 15 working days from the date of the notice served under that paragraph;
- c) in relation to a variation notification, a suspension notice, an enforcement notice or a landfill closure notice, not later than 2 months from the date of the notification or notice;
- d) in any other case not later than 6 months from the date of the decision or deemed decision.

Please note:

**An appeal will not suspend the effect of the conditions appealed against;** the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions or to add new conditions.

### **Contact Numbers for the Regulator**

The Regulator is the Pollution Control Section of Telford & Wrekin Council. They can be contacted on 01952 381818. You may also contact them by email at any time. [Environmental.health@telford.gov.uk](mailto:Environmental.health@telford.gov.uk)

### **Correspondence Address**

All correspondence to Telford & Wrekin Council relating to this information shall be addressed to:

**Pollution Control Team,  
Environmental Health and Wellbeing,  
Environmental Health,  
Telford & Wrekin Council,  
Darby House,  
P.O. Box 214,  
Telford,  
TF3 4LE.**