

NEBOSH National Diploma in Environmental Management Unit ED1

MANAGEMENT OF ENVIRONMENTAL RISK



ELEMENT 6: ENVIRONMENTAL LEGISLATIVE FRAMEWORK AND METHODS OF ENFORCEMENT

SAMPLE MATERIAL

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Statutory Obligations

Key Information

- The Pollution Prevention and Control Act 1999 is a framework Act that is largely implemented by the Environmental Permitting (England and Wales) Regulations 2010.
- Under the Environmental Permitting Regulations a permit is required to operate a regulated facility
 (installation, mobile plant, waste operation, radioactive substances activity, water discharge activity, groundwater
 activity, mining waste operation).
- An A(1) and A(2) installation environmental permit takes a wide range of environmental impacts into account, such as energy efficiency, waste management and consumption of raw materials.
- The installation requirements of the **Environmental Permitting Regulations** cover a wide range of processes, such as energy industries, production of metals and chemicals manufacture.

The Pollution Prevention and Control Act 1999 (PPC Act)

The **PPC Act** received royal assent in July 1999, and allowed regulations to be made implementing the European Council adopted **Directive 96/61** on Integrated Pollution Prevention and Control (the **IPPC Directive**).

The Directive has since been updated to include amendments and to introduce changes and edaptation. In its latest version it is now known as **Directive**2008/1/EC of 15th January 2008 concerning Integrated Pollution Prevention and Control

Jargon Buste

IPPC

Refers to the Directive's main purpose - to achieve an 'integrated' approach to pollution cor trol from a range of industrial and agricultural activities. 'Integrated' means looking at all the environmental impacts together rather than dealing with them separately. It aims to achieve a high level of protection of the environment as a whole.

The **PPC Act** is derived in a large measure from **IPC** itself, although there are some important differences. The PPC regime:

 Repeals, in full, Part I of the Environmental Protection Act 1990 covering Integrated Pollution Control and Local Air Pollution Control. The PPC Act introduced the concept of 'Best Available Techniques' (BAT) to ALL installations (rather than 'processes under EPA 1990) covered by the regime.

Jargon Buster

Installation

A stationary technical unit, such as a self-contained building, permanent structure or fixed plant, that is used for one or more listed activities (listed in the **Environmental Permitting Regulations**). Also includes any directly associated activities that are carried out at the same site.

The **PPC Act** is very much a Framework Act and consists of little information on the requirements of the PPC regime. More detailed law is provided by Regulations made from the **PPC Act**, which are described below.

Associated Legislation

The Environmental Permitting (England and Wales) Regulations 2010 implement the IPPC Directive in England and Wales and are made under the Pollution Prevention and Control Act 1999. This recent change in legislation means that IPPC permits are now known as installation environmental permits in England and Wales; however, they still implement the requirements of the IPPC Directive. In Scotland, the Directive is implemented by the Pollution Prevention and Control (Scotland) Regulations 2000.

As we saw in the previous element, the **Environmental Permitting (England and Wales) Regulations 2010**



cover the operation of **regulated facilities** which are classed as being:

- Installations.
- Mobile plant.
- Waste operations.
- Radioactive substances activities.
- Water discharge activities.
- Groundwater activities.
- Mining waste operations.

In this section we will cover the requirements for 'installation environmental permits' and cover other regulated facilities later in the course.

For installation regulated facilities the **EP Regulations 2010** require industry to prevent or, where that is not possible, to reduce pollution from a range of industrial and other activities, by means of an integrated permitting process based on the application of Best Available Techniques.

Topic Focus

A Part A(1) or Part A(2) installation environmental permit takes a wide range of environmental impacts into account, as follows:

- Emissions of pollutants to air, water and land.
- Energy efficiency; waste management,
- Consumption of raw materials
- Noise and vibration.
- Site restoration and decommissioning.*
 - * In order to satisfy this condition, an Application Site Report has to be prepared, giving the condition of the site at the time the permit was issued. The site must be returned to this condition after the plant has closed
- Accidents and incidents affecting the environment, with the aim of achieving a high level of protection for the environment as a whole. Permits must take into account local environmental conditions at the site concerned, its technical characteristics and its geographical location. Conditions must be included to address any transboundary pollution from an installation.

Part B permits are regulated on emissions to air only.

The requirements of the **EP Regulations** also apply to all installations and to parts of existing installations which undergo a 'substantial change'.

Development and Application of Pollution Prevention and Control (PPC)

The original IPPC Directive (Directive on Integrated Pollution Prevention and Control (96/61/EC)) came into force in October 1996 and had to be implemented for all new installations by October 1999. The Directive was derived in large measure from IPC as stated in the Environmental Protection Act 1990. (Remember that in England and Wales the IPPC Directive has largely been implemented through Part A(1) and A(2) installation environmental permits and as such is no longer known as IPPC, although the Environmental Permitting Regulations cover the requirements of the Directive.)



IPPC Directive similarities with the UK's IPC regime include:

- Permits include conditions worked out, as necessary, on a site 'installation' basis.
- BAT takes into account costs, advantages and economic feasibility in a similar manner to BATNEEC (Best Available Technology Not Entailing Excessive Costs) under IPC.
- Most of the installations covered by IPC are also covered by IPPC.
- Guidance will be issued primarily for the authorities.
- There is provision for public access to applications, permits and monitoring information.

However, there are some important differences, including:

- There are now three categories of process, designated as Parts A(1), A(2) and B. (In Scotland there are only Part A and B process designations.)
- IPPC applies to a wider range of industry, i.e. food processors, milk processors, intensive animal rearing, etc.
- PPC requires a **permit** rather than an **authorisation**.
- The range of environmental impacts which must be considered under PPC is wider than for IPC.
- Installations rather than processes are covered by the new Regulations.
- There are revised arrangements for dealing with changes to installations.
- There is no provision for any exemptions on the grounds of triviality.
- The Regulations allow for the use of generally binding rules, as an alternative to individually tailored permit conditions.
- Prohibition notices under EPA 1990 have been replaced by suspension notices.
- Uncer IPC, an operator was only required to notify a competent authority if a change in operating conditions would result in a breach of those conditions. If the proposed change is considered to be **substantial**, a public consultation procedure is now triggered.

The main aim of the Directive was to achieve "integrated pollution prevention and control" from a wide range of installations. This is undertaken by preventing (or where not practicable) reducing emissions, to land, water and air by industries that have the potential to pollute, as this achieves substantial protection to the environment in its entirety.

The main requirements of the current Directive are as follows:

- Application must be submitted to a competent authority (e.g. SEPA).
- The permit is required to take into account the full environmental performance of a plant.
- Emission limit values (ELVs) for substances and preparations as stated in Annex III of the Direct ve must be complied with.
- The permit must take into account loca environmental conditions, geographical location and other characteristics.
- Noise, light, vibration, accident prevention, the consumption of raw materials, energy efficiency, etc. must be regulated.
- Permit conditions must ensure that there are no breaches of EU environmental quality standards or EU legislation.
- The permit must contain monitoring requirements (e.g. methodology and frequency).
- Permits must be reviewed periodically and, where required, updated.

Technical guidance documents for each of the sectors known as BREF notes have been produced and identify the Best Available Technique for industries covered by the Directive.

More...

Further information on the IPPC Directive may be found on the website of the European Commission at http://ec.europa.eu/environment/air/pollutants/stationary/ippc/index.htm.

Relationship between PPC and Other Regulations

PPC seeks to regulate almost all of the environmental impact of the operation of an installation, for example:

- Contaminated land.
- Energy efficiency.
- Noise, vibration and raw materials consumption.
- Accident prevention (COMAH and PPC data can be used to satisfy both requirements).



- Environmental Impact Assessment (EIA). (A number of the installations require an EIA before consent for development is given. It is suggested that under certain circumstances, there may be benefit in running the two procedures together.)
- Waste.

In general, PPC complements Acts and Regulations that have been made in the above areas and does not revoke existing legal requirements. For example, PPC installations are still covered by the 'Duty of Care' for waste and still have to gain consent for discharges to sewer or surface water.

However, you should note that the introduction of the first set of environmental permitting regulations (Environmental Permitting (England and Wales) Regulations 2007) resulted in the replacement of over 40 pieces of legislation which largely implement the requirements of EU Directives. For example, Directive 99/13 (on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations) until the introduction of the EP Regulations was implemented through PPC permits under the Solvent Emissions (England and Wales) Regulations 2004. The requirements of the Directive are now implemented through the EP Regulations.

Structure and Application of Regulations to Implement PPC

Topic Focus

The installation requirements of the Environmental Permitting Legulations cover a wide range of processes, for example:

- Energy industries.
- Production of metals
- Chemicals manufacture.
- Recovery processes, e.g. waste oils and incinerators.
 - Tanneries.
- Surface treatments, e.g. paint and printing using solvents.
- Slaughterhouses.
- Large food and drink manufacturers.
- Intensive rearing of poultry and pigs.
- Dyeing of fibres and textiles.



More...

For a full list please refer to Schedule 1 to the **EP Regulations 2010** available at

http://www.legislation.gov.uk/uksi/2010/67scontents/made.

Enforcement under EP

The following organisations are involved in the enforcement of the installation EP/IPPC regime:

- In England and Wales, responsibilities are split between the Environment Agency and the Local Authorities
- Additionally, there is consultation depending on technical expertise between the two groups of regulators, e.g. the Local Authority are the consulters with regard to noise issues and the EA oriers assistance on matters where it has particular expertise.
- In Scotland, where IPPC permits still apply, the Scottish Environment Protection Agency is the sole regulator.
- In Northern Ireland, where IPPC permits still apply, separate arrangements have been made by the Northern Ireland Environment Agency and District Councils.



	Mobile Plant and Installation Risk-Based Grading System (England and Wales)		
	A(1)	A(2)	В
Polluting potential	Pollution to the air, water and land	Pollution to air, water and land	Pollution only to air
	The larger, most polluting installations/mobile plant	Smaller and less polluting than A(1) installations	The least polluting installations/mobile plant
Enforcing body	Environment Agency	Local Authority	Local Authority
Impacts that are controlled by permit	1. Energy efficiency	1. Energy efficiency	7. Emissions to air
	2. Waste management	2. Waste management	
	3. Consumption of raw materials	3. Consumption of raw materials	
	4. Noise and vibration	4. Noise and vibration	
	5. Site restoration and decommissioning	5. Site restoration and decommissioning	
	6. Accidents and incidents involving the environment	6. Accidents and incidents involving the environment	
	7. Emissions to air	7. Emissions to air	
	8. Emissions to water	8. Emissions to water	
	9. Emissions to land	9. Emissions to land	

The following enforcement options are available to the regulators:

- **Enforcement** notice if the regulator is of the opinion that an operator is not complying with their permit, or its conditions.
- **Suspension** of the permit if the regulator is of the opinion that the installation is being operated in such a manner as to involve a serious risk or pollution, a suspension notice can be served.
- The regulator also has powers, if he is of the opinion that an emergency situation exists, to take preventative steps rather than issuing a suspension notice. Costs can be recovered from the operator.

Application to Surrender a Permit

If an operator ceases or intends to cease operating an installation, an application for surrender must be made to the regulator. A site report must be submitted, which identifies any changes in condition of the site since the issue of the permit. The regulator need only accept the application for surrender, where they are satisfied with the condition of the site and that no further steps to avoid any pollution risk need be taken.

Transition from EPA to PPC

Part 1 of EPA 1990 has now been completely replaced by the Pollution Prevention and Control Act 1999 (and Regulations 2000, repealed in 2007) and subsequently installation permits under the Environmental Permitting Regulations 2010.

BAT

PPC introduced the concept of **Best Available Techniques (BAT)** to environmental regulations.

Operators of these industrial activities must use these
Best Available Techniques to control pollution from their installations.

Topic Focus

Best Available Techniques (BAT)

The Best Available Technique is in the **IPPC Directive** as effective and advanced development of activities and operational methods which indicates suitability of techniques for providing the basis for emission limit values designed to prevent, and where that is not practicable, generally to decrease the emissions and the impact on the environment as a whole.

The constituent parts of BAT, as we considered earlier in the course, are as follows:

- "Best" means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole.
- "Available Techniques" means those techniques which have been developed on a scale which allows
 implementation in the relevant industrial sector, under economically and technically viable conditions,
 taking into consideration the cost and advantages, whether or not the techniques are used or produced
 inside the United Kingdom (as long as they are reasonably accessible to the operator).
- "Techniques" includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Various factors are considered when determining the Best Available Technique, such as:

- The use of low-waste technology.
- The use of less hazardous substances.
- The furthering of recovery and recycling of substances generated and used in the process and of waste, where appropriate.
- Comparable processes, facilities or methods of operation which have been tried with success on an industrial scale.
- Technological advances and changes in scientific knowledge and understanding.
- The nature, effects and volume of the emissions concerned.
- The commissioning dates for new or existing installations or mobile plant.
- The length of time needed to introduce the Best Available Technique.
- The consumption and nature of raw materials (including water) used in the process and the energy efficiency of the process.

The BAT approach of IPPC differs from regulatory approaches based on fixed national emission limits. The legal instrument that ultimately defines BAT is the permit, and permits can only be issued at the installation level.

Revisi

Revision Questions

- 1. What environmental impacts are regulated by installation permits under EP/IPPC?
- 2. Describe BAT.

(Suggested Answers are at the end of this book.)



Powers of Inspectors, Different Types of Enforcement Action

Key Information

- The key environmental regulators in the UK are the Environment Agency (EA), the Scottish Environment Protection Agency (SEPA) and the Northern Ireland Environment Agency (NIEA).
- Enforcement notices, prohibition notices, abatement notices, suspension notices, remediation notices and civil sanctions can be issued under various environmental laws.
- The penalties for most environmental offences may involve a fine, imprisonment, or both
- The local authorities and water companies also have some environmental regulatory responsibilities.
- The enforcement agencies have numerous powers that can be used to carry out their duties (e.g. Section 117 of EPA 1990).

Roles of the Agencies

The Environment Agency

The Environment Agency (EA) took over responsibilities of Her Majesty's Inspectorate of Pollution, the National Rivers Authority and the waste regulatory function of local authorities in April 2006.

It is a non-departmental public body with its headquarters located in Bristol and is tasked with responsibility for policies, standards and making sure that a consistent environmental protection system exists. There are eight regional offices, including one covering the whole of Wales.

The key roles of the EA are as follows (this list is not exhaustive):

- Protect and enhance the environment.
- Adopt an integrated approach to environmental protection and enhancement.
- Undertake its duties in an economical, efficient and effective manner.
- Meet high standards of professional conduct.
- Ensure that individuals and organisations comply with relevant regulations.
- Provide high quality, timely advice to government.
- Prepare and collect high quality data and disseminate information.
- Undertake necessary research.

Pollution control responsibilities of the EA include:

 Permits for emissions discharges and disposal to air, land and water and monitoring compliance and enforcement under water legislation, permitting of installations and regulatory enforcement under the **EP Regulations**.

- Waste management licensing such as the registration of carriers and regulation and enforcement of the import and export of waste.
- Regulation of contaminated land 'special sites' in addition to those contaminated by radioactive materials.
- Monitoring the condition of the environment and publishing statistics and research advice to government.
- Guidance and general advice to industry and others on best practice.

The EA's enforcement policy identifies the situation under which the EA will in most cases prosecute. The general principles under which it operates are:

- Accountability firm but fair regulation.
- Proportionality action should be proportionate to the risk to the environment and to the seriousness of compliance with the law.
- Consistency this is seen as important but other factors such as history of offences may be taken into account.
- Targeting regulatory effort is focused towards areas that present the greatest risk to the environment.
- **Transparency** making sure it is clear why the action has been taken.

The **Legislative and Regulatory Reform Act 2006** established good principles which regulators must take into account, and covers the areas in the EA enforcement policy.





More...

The Environment Agency's website can be found at http://www.environment-agency.gov.uk/.

The Scottish Environment Protection Agency

The overall aim of the Scottish Environment Protection Agency (SEPA) is to:

"provide an efficient and integrated environmental protection system for Scotland that will both improve the environment and contribute to the Scottish Ministers' goal of sustainable development...".

In undertaking its pollution control duties, its main objective is to minimise or prevent, mitigate or remedy the impact that pollution may have on the environment, in addition to ensuring it has sufficient information surrounding the level of pollution of the environment. SEPA must also keep up to date with any improvements in technology or techniques for preventing and abating environmental pollution.

SEPA has a responsibility to regulate all installations identified as being controlled by the **Pollution Prevention and Control (Scotland) Regulations 2000.**SEPA also has responsibilities for:

- Regulating discharges to water, and for protecting and making improvements to water environments.
- Waste management activities (e.g. incinerators).
- Dealing with contaminated land that has been designated as a 'Special Site'
- Use and disposal of radioactive materials and wastes.

Under the legal system of Scotland, SEPA is not able to take offenders to court itself, but must instead refer cases to the Procurators Fiscal to enable a prosecution to occur.

More...

The SEPA website can found at http://www.sepa.org.uk/.

Northern Ireland Environment Agency (NIEA)

The Northern Ireland Environment Agency forms part of the Department of Environment (Northern Ireland) and has overall responsibility for pollution control and environmental protection.

The overall aims of the NIEA are to:

- Protect and conserve Northern Ireland's natural heritage and built environment.
- Control pollution.
- Promote the wider appreciation of the environment and best environmental practices.

The Pollution Prevention and Control Regulations (Northern Ireland) 2003 introduced the IPPC and local authority air pollution control regime to Northern Ireland, similar to those introduced under the PPC Act in the rest of the UK. Part A and B processes are regulated by the NIEA, with Part C processes (those with significant but less potential for air pollution) being regulated by district councils.

The Northern reland Pollution Inventory contains data on emissions from industry and is kept up to date by the NIEA.

More...

The NIEA website can be found at http://www.ni-environment.gov.uk.

Enforcement of Environmental Law

Offences

Offences under the Environmental Protection Act 1990

These include:

- Failure to comply with or contravening any requirement or prohibition imposed by an enforcement notice or a suspension notice.
- Failure to comply with any requirement imposed by regulatory authorities without a good excuse.
- Preventing another person from answering any question to which an inspector may require an answer
- Intentionally obstructing an inspector in the performance of his/her duties.
- Making a statement which is known to be false or misleading.



- Intentionally making a false entry in any record required to be kept under Section 7 of the Act.
- Pretending falsely to be an inspector.

Offences under the Pollution Prevention and Control Act 1999

It is an offence under this Act to undertake the following:

- Operate an installation without a permit.
- Contravene a permit or its conditions.
- Fail to comply with a court order requiring remedial action following conviction.
- Make false entries in a register.
- Falsify documents, etc.

Offences under the Water Resources Act 1991

Formerly it was an offence under Section 85(1) of the Water Resources Act 1991 to cause, or knowingly permit, poisonous, noxious or polluting matter to enter controlled waters unless consent to discharge had been granted. These powers have now been transferred to the Environmental Permitting (England and Wales) Regulations 2010.

Section 196 establishes trade effluent registers containing details of consents and agreements. This complements the registers maintained by the Environment Agency under the Environmental Permitting (England and Wales) Regulation 2010.

More...

For Scotland see the publications below for further information on relevant offences:

Water Environment (Controlled Activities) (Scotland) Regulations 2011

http://www.legislation.gov.uk/ssi/2011/209/cor ents/mare

Public Health etc (Scotland) Act 2008

http://www.legislation.gov.uk/asp/2008/5/contents

Water Environment and Water Services (Scotland) Act 2003

http://www.legislation.gov.uk/asp/2003/3/contents

Offences under the Water Industry Act 1991

Under Section 118 of this Act, it is an offence to discharge trade effluent into a sewer unless the

occupier of the premises has the consent of the sewage undertaker or other authorisation. However, the Act does not specify who should prosecute for these offences. So, in the case of discharge of dangerous substances and where controlled water is affected, the Environment Agency would be able to prosecute. The sewage undertaker could also prosecute.

Section 196 establishes trade effluent registers containing details of consents and agreements. This complements the discharge consents registers maintained by the Environment Agency, under **WRA 1991**.

Procedures for Appeal Against Decisions of Inspectors and Enforcing Authorities

Under the law, there is a right of appeal in the case of environmental offences, as with others. The right of appeal against a decision of the court is made to a higher court (see the figure which follows shortly).

There is a right of appeal also in the context of many separate pieces of egislation, e.g. an applicant may appeal if the responsible authority fails to determine an application for various licences, permits, etc. within a set time: there is a right of appeal against planning approval and against the conditions on an Abatement Notice, specifically Sections 15 and 22 of **EPA 1990** give details. This is similarly repeated in other environmental legislation, e.g. the **Statutory Nuisance (Appeals) Regulations 1995**. Appeals are determined by the Secretary of State. Time periods apply, e.g. an applicant has six months to appeal against the conditions of a Permit, two months against an Enforcement Notice and 21 days against an Abatement Notice. These will be detailed in the relevant regulations.

Options for Enforcement Action

Prosecution - Summary, Indictable and Hybrid Offences

Environmental law is statutory. It is a criminal offence to break environmental law.

Environmental cases are 'hybrid' in that they may be tried by a Magistrates' or a Crown Court. This latter situation arises in more serious 'indictable' offences. The structure of the Criminal Courts is shown in the following diagram.

Type of Court Action Rules on cases of complaint European Court of Justice governments, legality of EC legislation and interprets EC Rules on a point of law of Supreme Court public importance. Hears appeals against or fact, or against sentence. Court of Appeal Dismiss appeal. **Criminal Division** Quash lower courts' Order new trial. Unlimited fine and up to Crown Court two years in prison. Committal for trial at the Crown Court if there is **Indictable** Magistrates' Court prima facie evidence (a case on the face of it), i.e. there is a case to answer. **Summary** Depending on the offence, £50,000 and/or 6 months in prison.

The Structure of the Criminal Courts in England and Wales

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