

# **Process Industry Regulation**

# **Integrated Pollution Control [IPC]**

The Environment Agency is the statutory authority in England and Wales for the regulation of the largest and most complex industrial processes. This duty involves permitting, enforcing, inspecting and monitoring under the Environmental Protection Act 1990 [EPA90] Part I.

## **Assessing Environmental Harm**

The Agency ensures that pollution, particularly from industrial sources, is prevented or that it does not reach unacceptable levels, as required under national legislation. In addition, it enforces anti-pollution aspects of various items of European Union legislation and international environmental treaties. This involves:

- gathering and appraising data and information
- undertaking assessments based on the data
- assessing environmental harm, using informed judgement, and acting on this assessment.

The Agency regulates substance emissions from industry in England and Wales, utilising the concept of **Integrated Pollution Control [IPC**]. EPA90 requires those who wish to operate one of the listed processes, to apply for an **authorisation** from the Environment Agency.

The Agency must ensure that the commitments made in the application and the conditions placed in the authorisation satisfy the objectives of the Act, which include:-

- Best available techniques not entailing excessive cost [BATNEEC] should be used to prevent the release into any environmental medium of substances prescribed for that medium, and to ensure that prescribed and other substances which are necessarily released do not cause harm.
- The BATNEEC principle is to be used to ensure that the **best practicable environmental option** [BPEO] is adopted. BPEO is selected to ensure that the
  effect of the releases to air land and water are minimised in the context of their
  effect on the environment as a whole.

The determination of what constitutes the BATNEEC and the BPEO in each case is complex and site specific.

In addition to the characteristics of the individual process cited in the application for authorisation, the Environment Agency assesses the potential combined effects of several authorised processes in the same vicinity. In Anglian Region such studies have been undertaken in the Thames and Humber Estuaries.

Following authorisation, the Agency undertakes **Inspection** and **assessment** to ensure that the authorisation conditions are being complied with. Inspections are also carried out when reports of pollution incidents are received. If an inspector discovers a breach of authorisation conditions, an Enforcement Notice may be served under the EPA90. Where there is an imminent risk that the environment may be seriously polluted, a Prohibition Notice is served. In serious cases, the operator may be prosecuted.



### Process Information to Enable Assessment

The applicant must present to the Environment Agency:

- a full description of the process and the equipment used in which the significant releases of all substances to the environmental media are identified and quantified
- justification to show that the means to prevent, minimise or render releases harmless comprise the BATNEEC
- an indication of how the process will be managed and controlled, including staff and their qualifications
- a description of the means used to measure the releases which will necessarily occur, to demonstrate how the release limits specified in the authorisation are met
- an assessment of the effect of the releases on the local environment and demonstrate that the BPEO has been used.

# '...The public should have a right to information held by pollution control authorities'

[Government White Paper, 'This Common Inheritance', 1991].

Applications must be placed on public registers and advertised so that the public may have the opportunity to comment. There is also a requirement for the Environment Agency to consult formally with:

English Nature [EN] and Countryside Council for Wales [CCW]
Health and Safety Executive [HSE]
Ministry of Agriculture, Fisheries and Food [MAFF]
Sewerage Undertakers
District Council.

All responses received from consultees are considered when authorisations are drafted, and may result in additional conditions being placed in the authorisation.

# Monitoring

The Authorisation requires the operator to monitor releases and report the results:

- as an element of regulatory control
- to provide information to the public.

The Agency also commissions independent monitoring to ensure that operators' results are valid:

- routine monitoring
- ad-hoc or reactive monitoring
- site surveys and investigations.

# Environment Agency Information Centre ENVIRONMENT AGENCY 128189

### 'Tools' for Assessment

The Environment Agency provides its Inspectors with readily available 'tools' for assessment, such as computer modelling of dispersion from chimneys, technical guidance documents and advice from other Inspectors in industry sector groups.

Technical Guidance Notes [TGNs] are issued as a guide to inspectors in their assessment of an application for, or variation of, an authorisation under the EPA90. They describe current practices, focusing on process-specific matters. Guidance is given on the achievable levels of releases for new processes applying the best combination of techniques to limit environmental impact. They indicate what is achievable and should not be confused with limits in authorisations which are based on BATNEEC considerations and take account of:

- The plant's technical characteristics
- its rate of utilisation and remaining life
- the nature and volume of polluting emissions from it
- the desirability of not entailing excessive costs for the plant concerned, having regard in particular to the economic situation of undertakings belonging to the category in question.

Technical Guidance Notes [TGNs] and Best Available Technology [BAT] Review Reports are available from the Stationery Office.

