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A Driver for Environmental Performance in Industry”
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The introduction of integrated permitting to Ireland

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THE INTRODUCTION OF INTEGRATED PERMITTING TO IRELAND

An Overview
by
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Primary Environmental Legislation in Ireland

- 1963/83 Planning and Development Acts
- 1977/90 Water Pollution Act & Amendment
- 1979 etc. Waste Regulations
- 1987 Air Pollution Act
- **1992 EPA Act**
- 1996 Waste Management Act

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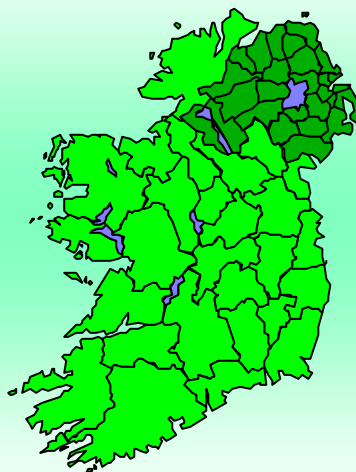
Reasons for EPA

- ➔ Conflict between development and protection role of Local Authorities
- ➔ Increase in pollution incidents, fish kills etc.
- ➔ Lack of public confidence in the existing system
- ➔ Anticipation of further EU driven legislation
- ➔ Introduction of a unified permit system based on IPC

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Regulatory Authorities in Ireland



- 29 County Councils
- 49 Urban District Councils
- 5 Borough Corporations
- 5 County Borough Corporations
- 8 Regional Fisheries Boards
- 1 Department of the Marine
- 1 EPA

World Bank Workshop

Washington 1997

Environmental Protection Agency

- Legislation enacted in 1992
- Full-time executive Board appointed 1993
- Staff recruited 1993 - 1994
- First IPC Licence granted end 1994

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Functions of the Agency

- ➔ Licensing and regulation of industrial and other processes with significant polluting potential on the basis of IPC and BATNEEC
- ➔ Monitoring of environmental quality
- ➔ Setting Environmental Quality Objectives and developing codes of practice
- ➔ Promoting and co-ordinating environmental research
- ➔ Promoting the use of environmental audits and establishing an Eco-labelling scheme
- ➔ Supervision of local authorities

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Activities to be Licensed

- 1 Minerals (4)
- 2 Energy (2)
- 3 Metals (9)
- 4 Mineral Fibres, Glass (4)
- 5 Chemicals (11)
- 6 Intensive Agriculture (2)
- 7 Food and Drink (7)
- 8 Wood, paper, textile, leather (6)
- 9 Fossil Fuel (4)
- 10 Cement (1)
- 11 Waste (4)
- 12 Surface Coating (3)
- 13 Other activities (4)

61 Categories
~800 activities

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Aims of IPC

- prevent pollution at source
- minimise releases to the environment
- apply *BATNEEC principle*

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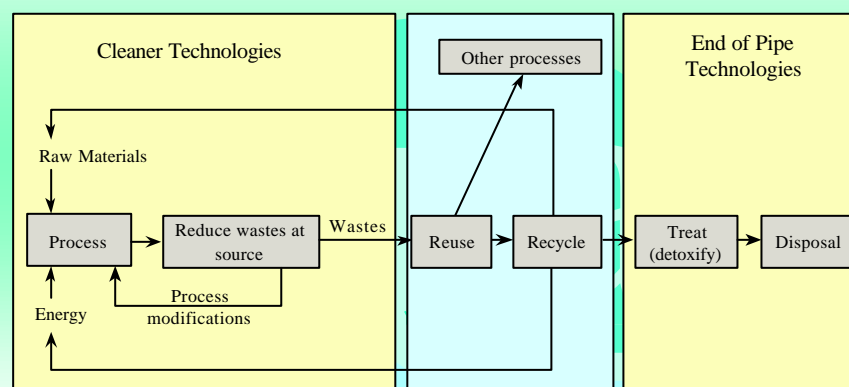
Agency's Approach

- ★ Process design/redesign to eliminate emissions
- ★ Substitution of materials/solvents
- ★ Waste minimisation by process control, inventory control and end-of-pipe technology
- ★ Onus is on the developer or operator to demonstrate that in selecting a process all avenues for **elimination** and **substitution** have been examined and any appropriate measures adopted

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Hierarchy of Pollution Control



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BATNEEC

- **Best** at preventing pollution
- **Available** meaning procurable by plant operator
- **Technology** including techniques, maintenance, training, etc.
- **Not Entailing Excessive Cost** for the sector/class concerned - balances benefits and costs.

GUIDANCE ON BATNEEC

- BATNEEC Guidance Notes
 - Sectoral Notes (55 of 61 sectors)
- Noise Note
- EIS Note

BATNEEC Guidance Notes

- ➔ Major sources of emissions
- ➔ Composition of emissions
- ➔ Technologies to control
 - minimisation, containment, recovery/reuse
 - emission reduction, treatment and disposal
- ➔ Emission limit values for each emission
- ➔ Compliance monitoring requirements

Other Issues to be Considered

- ★ raw material extraction
- ★ off-site power generation
- ★ impacts of waste disposal

However, it is also generally envisaged that *existing facilities* will progress towards attainment of similar emission limit values to those for new facilities, but the specific ELV requirements and associated time frames will be identified on a case by case basis when the licence application is being processed.

Furthermore, for *all facilities*, additional and more stringent requirements may be specified on a site-specific basis whenever environmental protection so requires. Hence the BATNEEC guidelines are not the sole basis on which licence emission limit values are to be set since information from other sources will also be considered including site-specific environmental and technical data, plant financial data and other relevant information.

IPC to Date

● Applications	550
– Licenses issued	424
– Refused/withdrawn/abandoned	30
– Proposed Determinations	22
– Under consideration	74
● Licenses Objected to	
– First party objections	221
– Third party objections	107
● Oral Hearings	2

Condition 2 Management of the Activity

- 2.1 The licensee shall establish and maintain an Environmental Management System (EMS) which shall fulfil the requirements of this licence. The EMS shall include as a minimum those elements specified in the Conditions 2.2 to 2.9 below.

Conditions 2.2 to 2.9

- 2.2 Objectives and Targets
- 2.3 Environmental Management Programme (EMP)
- 2.4 Pollution Emission Register (PER)
- 2.5 Documentation
- 2.6 Corrective action
- 2.7 Awareness and Training
- 2.8 Responsibilities
- 2.9 Communications

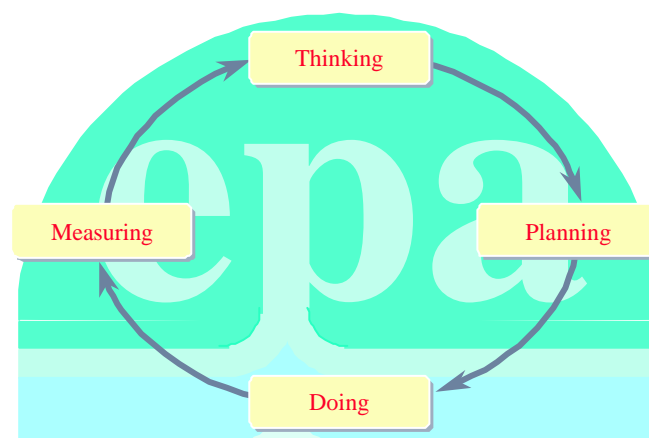
The Benefit of an EMS

- Structured environmental management tool
- Allows for the preparation and implementation of environmental programmes
- Reduction in emissions
- Waste minimisation
- Improved environmental control

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The Improvement Loop



EPA Enforcement Post Licence

- Check for compliance with licence requirements.
- Check on quality of monitoring by the licensee.
- Check for incidents reported/unreported releases
- Audit and direct programmes of environmental improvement.
- Assess the quality of the receiving environment.

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Enforcement - Monitoring

	<i>1996</i>	<i>1997</i>	<i>1998</i>
• Monitoring visits by the Agency	504	889	1,244
• Samples analysed by the Agency	1,272	1,909	2,095
• Total no. of analyses by the Agency	24,139	36,405	36,504
• Audits	21	60	102
• Inspector's site visits	329	490	642

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Financing

- Application Fees
 - Range €2,200 - €23,000
 - Average Fee €7,000
- Enforcement Fees
 - Average in 1998 was €5,000

Charges

- Processing Returns
 - Annual Environmental Report
 - Routine Self-Monitoring Reports
 - Once-off Reports
- Site Visits
 - Typically 1-2 per year
- Audits
 - Typically 0.5 - 1 per year
- Agency Monitoring
 - (Travel costs, time and analysis)