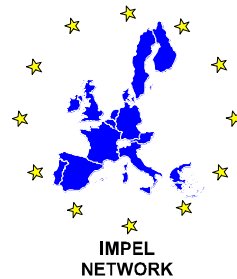
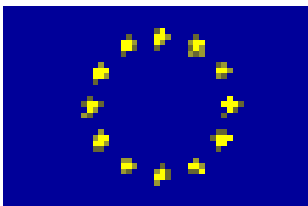




IMPEL

**Workshop on
Integrated Permitting**

Dublin 2000



European Union Network for the Implementation
and Enforcement of Environmental Law



**IMPEL
NETWORK**

European Union Network for the Implementation
and Enforcement of Environmental Law

FOREWORD

The European Union Network for the Implementation and Enforcement of Environmental Law is an informal network of the environmental authorities of EU Member States. The European Commission is also a member of IMPEL and shares the chairmanship of management meetings.

The network is commonly known as the IMPEL Network.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on certain of the technical and regulatory aspects of EU environmental legislation. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. It promotes the exchange of information and experience and the development of greater consistency of approach in the implementation, application and enforcement of environmental legislation, with special emphasis on Community environmental legislation. It provides a framework for policy makers, environmental inspectors and enforcement officers to exchange ideas, and encourages the development of enforcement structures and best practices.

Information on the IMPEL Network is also available through its web site at <http://europa.eu.int/comm/environment/impel>.

This workshop report is the result of a project within the IMPEL Network. The content does not necessarily represent the view of the national administrations nor of the Commission. The report was adopted during the IMPEL Meeting of 6-8 December 2000.

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Section 1: INTRODUCTION

- 1.1** The Irish EPA, on behalf of IMPEL, organised a 2-day Workshop on environmental permitting in Dublin on 12th and 13th April 2000. The Workshop was entitled '**IMPEL Dublin 2000 (IPPC Permitting Practices in the MS)**' and participants from 15 Member States were invited as well as observers from the 12 Accession Candidate (AC) countries. Their remit was to discuss and analyse the issuing of environmental permits to industry with regard to strict new requirements under the provisions of the Integrated Pollution Prevention and Control Directive, effective since 1999.
- 1.2** The Workshop had two key objectives:
- (i) To help explore differences which exist between Member States (MS) in the area of environmental permitting, and
 - (ii) To assist in the establishment of consistency in the approaching IPPC permitting process, as required by the IPPC Directive.
- 1.3** In order to achieve the above objectives, the following issues were among those addressed:
- The best approach towards compliance with the IPPC Directive (96/61/EC).
 - Consensus on the form and content of IPPC Permits for industrial activities in the EU.
 - Bringing the accession countries up to speed with the practices of environmental regulation currently in use in the EU.
 - The application of "Best Available Techniques" (BAT) for the reduction of pollutant loads into the environment, and how this concept can be incorporated into Member State thinking while drawing up IPPC permits.
 - The role of BREFs (BAT Reference Documents) in environmental permitting.
 - Achieving consensus among the Member States on the approaches and methods to be used on drafting IPPC permits and how this can be best developed to prevent and control pollution in the future.
- 1.4** This report documents the activities and findings of the Workshop.

Section 2: ACTIVITIES

- 2.1** The initial stage of the **IMPEL Dublin 2000** project involved the agreement (through consultation with Member States) on the number and type of sectors to include in the permitting exercise. This took place in September 1999 via e-mail to each MS participant or IMPEL National Co-ordinator. Consideration was given to agriculture, pharmachem and energy sectors and the consensus view was that the exercise should concentrate on only one industrial sector, power generation.
- 2.2** A specimen permit application was drafted for circulation to all participants in December 1999.
- 2.3** Queries and requests for additional information /clarification were submitted to the Irish EPA in January 2000 and responses were provided to each of these by February 2000.
- 2.4** Approval was given by the European Commission for inclusion of the 12 AC IMPEL countries and invitations and information was accordingly issued to the respective AC IMPEL National Co-ordinators in February 2000. It was emphasised that AC IMPEL visitors would attend the Workshop as observers rather than direct participants in the exercise but any contributions made would be welcomed.
- 2.5** Completed IPPC permits were received by the EPA in mid March 2000 from the following Member States – Denmark, Germany, Ireland, Netherlands, Sweden (selected conditions) and the United Kingdom. “Refusals” to grant IPPC permits were received from Austria and Belgium. Finland subsequently provided an outline permit.
- 2.6** The permits and refusal documents were collated and disseminated to the participating MS by the end of March 2000. The outline permit received from Finland was circulated on Day 1 of the Workshop.
- 2.7** A total of 21 MS participants (representing 12 out of 15 MS countries) and 14 AC IMPEL participants (representing all 12 AC countries) attended the Workshop at the Burlington Hotel in Dublin on 12th and 13th April. Attendees are listed in *Appendix 1*.
- 2.8** The Irish EPA made a series of presentations on Day 1 of the Workshop. The topics included:
- 1) IPPC Directive and Permitting
 - 2) Role of BREF (BAT Reference Documents)
 - 3) Description of Fictitious Application
 - 4) Requests for Additional Information
 - 5) Initial Comparison of Permits

Sections 3 – 6 of this report cover each of these topics separately. The Workshop schedule is contained in *Appendix 2*.

- 2.9** The participants formed four separate Workgroups, each with an appointed Rapporteur, on the afternoon of Day 1. They combined their knowledge and experience to comprehensively review and evaluate the permitting process. A listing of the Workgroup members is contained in *Appendix 3*.
- 2.10** The Rapporteur for each Workgroup presented the findings to the Workshop on Day 2. These findings were then summarised as key conclusions and are provided in Section 7 of this report.
- 2.11** The participants completed a Feedback Questionnaire concerning the Workshop itself and IPPC permitting practices in general. A summary of findings and responses is contained in *Appendix 4*.

Section 3: IPPC AND PERMITTING

Outline of legal requirements under the provisions of the Integrated Pollution Prevention and Control Directive as presented by Mr Paddy Nolan, Programme Manager, Environmental Protection Agency.

3.1 Application

- All new installations must have a permit before they can operate. (*Article 4*)
- Existing installations must have their permits updated in accordance with the directive no later than 8 years after it comes into effect. (*Article 5*)
- Information to be included in the application:
 - *Facts about the Installation*
 - Description of installation and activities.
 - Details of raw materials or energy used or generated on site.
 - Details of the technology or other techniques to be used to reduce emissions.
 - The sources of emissions.
 - Non technical summary of application.
 - *Environmental Information*
 - Details of the condition of the site.
 - The nature and quantity of emissions into each environmental media and their significant effects on the environment.
 - *Protective and Preventative Measures*
 - Details of measures for the prevention and recovery of waste generated by the activity.
 - An outline of the further measures planned by the operator to meet his obligations under the Directive.
 - Details of the monitoring programme the operator proposes to carry out. (*Article 6*)

3.2 Application Procedure

- All new installations must be permitted in accordance with the Directive before they can operate. (*Article 4*)
- Changes in operation of installation must be notified to the competent authority and where necessary an existing permit must be updated. No significant change can be allowed to come into effect without a revised permit being in place. (*Article 12*)

- Permits must be periodically reconsidered and where necessary the conditions updated. Reconsideration must take place where :
 - significant pollution is being caused under the terms of the existing permit;
 - new or better technology is available to further reduce pollution without excessive costs;
 - better safety measures are to be used;
 - changes in legislation. (*Article 13*)
- Where more than one competent authority is involved then the procedures must be fully co-ordinated to guarantee an integrated approach by all authorities. (*Article 7*)
- Competent authorities can only grant a permit where they are satisfied that the installation fully complies with the Directive, otherwise they must refuse. (*Article 8*)
- Where more than one competent authority is involved then the procedures must be fully co-ordinated to guarantee an integrated approach by all authorities. (*Article 7*)
- Competent authorities can only grant a permit where they are satisfied that the installation fully complies with the Directive, otherwise they must refuse. (*Article 8*)
- Where emissions from an installation are likely to have significant negative effects on the environment of another Member State(s), provision has been made for the notification of the potentially affected MS at the same time as this information is made available to the nationals of the MS in which the activity is to be located. (*Article 17*)

3.3 The Permit

- Note the definition of ‘permit’ in the Directive.
- Its purpose is to achieve integrated prevention and control of pollution.
- The following guiding principles must be taken into account by the competent authority when determining a permit:
 - appropriate preventive measures are put in place using BAT or other techniques to meet EQS;
 - no significant pollution is caused;
 - waste is minimised, reused or recycled before being disposed;
 - energy is used efficiently;
 - accidents and incidents with environmental effects are minimised;
 - remediation and restoration measures are in place following cessation of activity. (*Article 3*)

- The Conditions of the permit must be fully co-ordinated where there is more than one competent authority. (*Article 7*)
- All permits must include details of the arrangements made for air, water and land protection. (*Article 8*)
- The permit must include:
 - Measures to ensure that the installation is operated using BAT, meets any relevant EQS and is operated in accordance with the obligations on the operator outlined in Article 3.
 - Measures to abate the significant adverse effects identified in the EIS.
 - ELV's for those parameters /substances listed in Annex III where significant quantities are involved.
 - ELV's are to be based on BAT having regard to the location of the installation and the state of the local environment. In any event the condition shall minimise transboundary or long distance pollution and ensure a high level of environmental protection as a whole.
 - A monitoring programme for emissions that will detail the frequency and methodology used.
 - Arrangements for emergencies and incidents to ensure safe shut down of installation.
 - Any other conditions that the competent authority considers necessary. (*Article 9*)

3.4 Enforcement of Permit

- Competent Authorities must ensure that:
 - Conditions of the permit are complied with.
 - The permit holder regularly reports details of monitoring results and of any incidents of environmental significance.
 - Installations are inspected at regular intervals and samples of releases or emissions are taken for analysis. (*Article 14*)

Section 4: ROLE OF BREF

*Description of the role of BAT Reference documents as presented by
Mr Frank Clinton, Senior Licensing Inspector, Environmental Protection Agency.*

4.1 IPPC Directive (96/61/EC)

- Defines BAT as:
 - “ *‘best available techniques’* shall mean the most effective and advanced stage in the development of activities and their methods of operation which indicate 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 of the environment as a whole.”

4.2 Article 16

- States:
 - “The Commission shall organise an exchange of information between Member States and the industries concerned on best available techniques, associated monitoring, and developments in them. Every three years the Commission shall publish the results of the exchanges of information.”

4.3 The Sevilla Process

- To advance the development of BAT throughout the MS, the Commission established:

The Information Exchange Forum (IEF)

and

The European IPPC Bureau at Seville, Spain.

- A consultation process involving industry, MS regulators and the NGOs was established with a view to developing BAT reference documents for each of the sectors specified in Annex I of the IPPC Directive 96/61/EC.
- To date two final BREFs (drafts) have been produced:
 - One for Cement & Lime (Adopted)
 - One for Iron & Steel production (Adopted)
- Two other BREFs are at an advanced stage:
 - One for pulp & paper (Generally endorsed)
 - Non ferrous metals (Generally endorsed).

4.4 So what is a BREF?

- To understand what a BREF is, it's necessary to outline what a BREF is *not*.
 - BREFs are not prescriptive.
 - They are not a legal interpretation of the Directive itself.
 - They do not excuse the MS in any way from obligations of the Directive, or obligations to protect the environment.
 - They are not exhaustive, do not take account of local conditions.
 - They cannot determine BAT at either local, regional, national or community levels.

4.5 A BREF is a BAT Reference document.

- A BREF represents a collection of information for the guidance of decision-makers involved in the implementation of the IPPC Directive (Litton,¹ 2000).
- BREFs are aimed at :
 - Industry operators
 - Permit writers
 - Policy makers
 - Society at large.

¹ Litton, D., (2000) 'Bat Reference Documents – What Are They and What Are They Not' Proceedings of the Sevilla Process, Stuttgart, April 2000.

4.6 Using BREFs in IPPC Permitting

- BREFs may be used within the MS in the development of BAT.
- BREFs may be used by the permit writer as an additional guidance (additional to the MS prescribed BAT).
- BREFs may be used to aid the permit writer in assigning limits for emissions where prescribed BAT is not available.

4.7 Overview

BREFs will form a very useful resource for IPPC permit writers in the MS, providing up to date information (which has been agreed between industry, environmental regulators and other interested parties) on the processes employed and abatement techniques in use in specific industrial sectors. Emissions levels are also provided which will aid MS in defining BAT at a national level.

Section 5: OUTLINE OF FICTITIOUS APPLICATION

5.1 West Shannon Power Plant

- For the purposes of the IPPC permitting exercise, a fictitious application was drawn up. The subject of the application was a proposal for a gas-fired electricity generating station.
- The site for development had been historically used for electricity generation with a Station A constructed in the 1950's and decommissioned in 1983 and a Station B constructed in the 1960's and currently in the process of decommissioning.
- The proposed installation will achieve an efficiency of 55% and will use a water injection system for NO_x suppression. Air cooling is to be employed and there will be no significant thermal emission to surface waters.

5.2 Application Contents

- Detailed information with regard to the proposed project was given in relation to the following:
 - inventory of chemicals to be used on site;
 - inventory of wastes to be used on site;
 - technical information on an auxiliary water cooling circuit;
 - atmospheric emissions, including ambient modelling information;
 - emissions to surface waters;
 - receiving water quality data and modelling impact information;
 - containment of bulk liquids;
 - noise emissions and modelling impact information.

5.3 Further Information

The document *Description of Fictitious Application* contains the full application details. A copy can be obtained by contacting the EPA and requesting "L/IMPEL 2000/Wkshop_Application.doc" or by emailing Dr Ken Macken at k.macken@epa.ie.

Section 6: INITIAL COMPARISON OF PERMITS

Evaluation and assessment of permits provided by Member States as jointly presented by Dr Ken Macken and Mr Frank Clinton, EPA

6.1 Introduction

Completed IPPC permits were received by the EPA in mid March 2000 from the following Member States – Denmark, Germany, Ireland, Netherlands, Sweden and the United Kingdom. “Refusals” to grant IPPC permits were received from Austria and Belgium. Finland subsequently provided an outline permit. Divergent views to some extent reflected the differing legislative positions in individual Member States and also different background levels of gases e.g. NO₂. Two Member States felt a refusal was appropriate. One of the reasons concerned the use of SCR (Selective Catalytic Reduction) and the other was based on energy efficiency. It is noteworthy that these reasons are to some extent opposing as SCR will reduce efficiency.

6.2 Structure of the Permit

<p>Austria (refusal)</p>	<ul style="list-style-type: none"> • No permit provided. • Commented: <ul style="list-style-type: none"> - Such a separate permit is not legal in Austria. - IPPC Directive not yet in Austrian law. - Construction must be included. - Considerable gaps and contradictions in application information provided. - Low NO_x burners not regarded as ‘Reduction Technology’ in Austria (simply “state-of-art” operation). - Would require Selective Catalytic Reduction (SCR) or equivalent. - Air impact assessment requires 30-minute values (not hourly) and 99.8%ile background data.
<p>Belgium (Flanders) (refusal)</p>	<ul style="list-style-type: none"> • No permit provided. • Commented: <ul style="list-style-type: none"> - Insufficient application information provided. - No EIA² - No non-technical summary of application. - Belgium would require >56% efficiency.

² Participants were instructed to assume EIS was completed.

<p>Denmark</p>	<ul style="list-style-type: none"> • Permit provided (6 pages). • Permit covers: <ul style="list-style-type: none"> - Air - Noise and Vibration - Water - Waste - Ground - Storage - Monitoring and Reporting
<p>Germany</p>	<ul style="list-style-type: none"> • Permit provided (11 pages). • Would like EIA. • IPPC not yet implemented in Germany. • Permit covers: <ul style="list-style-type: none"> - Documents submitted - General obligations - Air - Noise - Waste - Storage - Safety - Prohibition on use of Hydrazine
<p>Ireland</p>	<ul style="list-style-type: none"> • Permit provided (28 pages). • Permit covers: <ul style="list-style-type: none"> - Scope and Interpretation - Air - Noise - Water - Waste - Monitoring and Reporting - Emergency Response - Site Closure - Environmental Management System

<p>Netherlands</p>	<ul style="list-style-type: none"> • Permit provided (18 pages + 7 pages Water Permit). • Additional information procedure was utilised. • Assumed industrial zone with no environmentally sensitive areas in the vicinity. • Permit covers: <ul style="list-style-type: none"> - Air - Noise - Waste - Ground - Monitoring and Reporting - Safety - Corporate Environmental Plan and Annual Environmental Programme - EMS
<p>Sweden</p>	<ul style="list-style-type: none"> • Permit provided (Selected permit conditions). • Permit covers: <ul style="list-style-type: none"> - Air (SCR by year 3 if ambient problems apparent) - Noise - Water (pH only) - Waste (general requirements) - Storage - Monitoring - Stack height (minimum 100 m)
<p>United Kingdom</p>	<ul style="list-style-type: none"> • Permit provided (17 pages) • Permit covers: <ul style="list-style-type: none"> - Plant Description and Operation - Air - Noise, Vibration and Heat - Water - Waste (general requirements) - Ground - Monitoring and Reporting - Use of Energy • Commented: <ul style="list-style-type: none"> - Insufficient detail - No justification of BAT - List 1 substance discharge prohibited

6.3 Comparison of Atmospheric Emission Limits in Permits From Member States

(a) Gas Firing

- All in mg/Nm³, 15% oxygen and dry gas (unless otherwise stated).
- Where O₂ content not specified, assume 15% oxygen and dry gas.

Emission by Country	<i>NO_x</i>	<i>NH₃</i>	<i>SO₂</i>	<i>Dust</i>	<i>PM₁₀</i>	<i>CO</i>
Denmark	225 (6% O ₂)	-	35 (6% O ₂)	5	0.08	-
Finland	60 mg NO ₂ /MJ	100	-	-	-	5 target
Germany	50 mg/Nm ₃	-	35 (3% O ₂)	5 (3% O ₂)	-	100
Ireland	50 (50η/35)	-	10	5	-	-
Netherlands	55 mg/Nm ₃	-	-	-	-	-
Sweden*	40 (annual mean as NO ₂)	5 ppm (monthly mean)	-	-	-	-
United Kingdom	55 (also 1100 t/a)	-	-	-	-	50

* Sweden outlined that SCR would be required in an IPPC permit in cases where it appeared that ambient NO_x problems were likely to arise. Austria indicated in its refusal of a permit that SCR would be a mandatory requirement of an IPPC permit.

(b) Oil Firing

- All in mg/Nm³, 15% oxygen and dry gas (unless otherwise stated).

Emission by Country	<i>NO_x</i>	<i>NH₃</i>	<i>SO₂</i>	<i>Dust</i>	<i>PM₁₀</i>	<i>CO</i>
Denmark	225 (6% O ₂)	-	400 (6% O ₂)	50	0.08	-
Finland	60mg NO ₂ /MJ	-	-	10	-	-
Germany	120	-	Max. S 0.2% w/w	30 (3% O ₂)	-	175 (3% O ₂)
Ireland	110 (poss. 250 interrupt)	-	120	10	-	-
Netherlands	120	-	Max. S 0.2% w/w	10	-	-
Sweden	40 (annual mean)	5 ppm (monthly mean)	Max. S 0.1% w/w	-	-	-
United Kingdom	120		3 t/a	-	-	50

6.4 Comparison of Controls on Waste Disposal in Permits from Member States

Denmark	<ul style="list-style-type: none"> • General Provision • Maximum stored 100 tonnes
Germany	<ul style="list-style-type: none"> • General provision (List of contractors) • Disposal records
Ireland	<ul style="list-style-type: none"> • General provision (List of contractors) • Disposal records • Schedule of approved wastes
Netherlands	<ul style="list-style-type: none"> • Examine recycling of waste • Included in Annual Environmental Programme
Sweden	<ul style="list-style-type: none"> • General Provision • Spill protection
United Kingdom	<ul style="list-style-type: none"> • General provision (List of contractors) • Disposal records • Schedule of approved wastes

6.5 EMR and Light

Provided for in one permit only:

United Kingdom	<ul style="list-style-type: none"> • General provision for heat • Prohibition on light nuisance
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6.6 Comparison of Controls on Emissions to Water in Permits from Member States

Austria (refusal)	<ul style="list-style-type: none"> • Flowrate, temperature considered
Belgium (refusal)	<ul style="list-style-type: none"> • WWTP and boiler blowdown would be controlled.
Denmark	<ul style="list-style-type: none"> • Permission to discharge specified. • Emission point specified (SW1 to SW5) • Limits specified for oil, BOD, total N, ammonia, total P and pH.
Germany	<ul style="list-style-type: none"> • Alternative to hydrazine to be found and used instead.
Ireland	<ul style="list-style-type: none"> • 13 specific conditions on emissions to water, as well as 2 detailed schedules with limits for flow, temperature, toxicity, BOD, SS, TDS, ammonia, phosphate and mineral oils. • Effluent treatment controls outlined in a schedule. • Schedule for monitoring of emissions to waters.
Sweden	<ul style="list-style-type: none"> • Limits specified for pH. • Controls on storage of chemicals.
United Kingdom	<ul style="list-style-type: none"> • Indicative limits only. • Emission points specified (SW1 to SW5) • Schedules with limits specified for BOD, SS, pH, oils, cadmium, mercury, hydrazine, ammonia, phosphate, sulphate and temperature.

6.7 Controls for Noise in Permits from Member States

Austria (refusal)	<ul style="list-style-type: none"> • Comments made about information which was not included in the application.
Belgium (refusal)	<ul style="list-style-type: none"> • Limits at noise sensitive locations of : 50 dB(A) daytime 40 dB(A) nighttime.
Denmark	<p>Limits at noise sensitive locations (NSLs) of :</p> <ul style="list-style-type: none"> • Weekday limits: 55 dB(A) daytime 45 dB(A) evenings. • Sundays / Holidays: 45 dB(A) all day. • Everyday: 40 dB(A) night-time • Tonal noise & vibrations also controlled
Germany	<ul style="list-style-type: none"> • NSL limits: 55 dB(A) daytime 40 dB(A) night-time
Ireland	<ul style="list-style-type: none"> • NSL limits : 55 dB(A) daytime 45 dB(A) night-time • Prohibition on tones & impulsive noise • Annual noise survey
Netherlands	<ul style="list-style-type: none"> • Each NSL has specific limits ranging: Daytime: from 43 to 53 dB(A) Evening: from 43 to 53 dB(A) Night-time: from 39 to 43 dB(A). • Monitoring criterion specified
Sweden	<ul style="list-style-type: none"> • NSL limits: Daytime : 50 dB(A) Evening : 45 dB(A) Night-time: 40 dB(A) • Impulsive noise at night controlled to 60 dB(A) instantaneous.
United Kingdom	<ul style="list-style-type: none"> • NSL limits: Daytime: 55 dB(A) Night-time: 45 dB(A) • Perimeter limits: 58 dB(A) and no exceptional value of > 63 dB(A)

6.8 Approach to Site Contamination in Permits from Member States

<p>Austria (refusal)</p>	<ul style="list-style-type: none"> • Prior to permit being granted in Austria an order would be issued requiring the clean up of asbestos and oil contamination on the site.
<p>Belgium (refusal)</p>	<ul style="list-style-type: none"> • Contamination issue not addressed in the refusal.
<p>Denmark</p>	<ul style="list-style-type: none"> • Contamination issue not specifically addressed in the permit.
<p>Germany</p>	<ul style="list-style-type: none"> • Contamination issue not specifically addressed in the permit.
<p>Ireland</p>	<ul style="list-style-type: none"> • Site investigation strategy incorporated in the permit, which includes a requirement to investigate and report on “Historical disposal practices, containment measures, geology & hydrogeology of the site, capping design, restoration details, gas & leachate considerations, monitoring records, historical incidents as well as depths and extent of waste already deposited.”
<p>Netherlands</p>	<ul style="list-style-type: none"> • Historical deposit of wastes not addressed in the permit. Potential future contamination is addressed, and soil surveying is included.
<p>Sweden</p>	<ul style="list-style-type: none"> • Historical ground contamination not specifically addressed in the permit.
<p>United Kingdom</p>	<ul style="list-style-type: none"> • In the Schedule (Table 8.1) Improvement Programme: “The operator shall commission an independent contamination report to assess and quantify the background state of the land associated with the permitted installation”.

6.9 Approach to Decommissioning in Permits from Member States

Austria (refusal)	<ul style="list-style-type: none"> As this submission represents a refusal, consideration of decommissioning is not relevant.
Belgium (refusal)	<ul style="list-style-type: none"> As this submission represents a refusal, consideration of decommissioning is not relevant.
Denmark	<ul style="list-style-type: none"> Decommissioning not specifically addressed in the permit.
Germany	<ul style="list-style-type: none"> Decommissioning not specifically addressed in the permit.
Ireland	<ul style="list-style-type: none"> Condition 13 deals with “Residuals Management”.
Netherlands	<ul style="list-style-type: none"> Closing audit specified with requirements for “...a final examination of soil and groundwater.”
Sweden	<ul style="list-style-type: none"> Decommissioning not specifically addressed in the permit.
United Kingdom	<ul style="list-style-type: none"> Decommissioning not specifically addressed in the permit.

6.10 Monitoring Requirements in Permits from Member States

<p>Austria (refusal)</p>	<ul style="list-style-type: none"> • As the submission represents a refusal, monitoring is not addressed.
<p>Belgium (refusal)</p>	<ul style="list-style-type: none"> • As the submission represents a refusal, monitoring is not addressed.
<p>Denmark</p>	<ul style="list-style-type: none"> • Atmospheric Emissions: <ul style="list-style-type: none"> - continuous for NO_x, dust, oxygen, CO₂, SO₂. • Effluent: <ul style="list-style-type: none"> - continuous for flow, pH; - weekly for oils, total N, ammonia, BOD and total P.
<p>Ireland</p>	<ul style="list-style-type: none"> • Emissions to atmosphere: <ul style="list-style-type: none"> - schedules require monitoring for NO_x, CO, O₂, water vapour content. • Effluent: <ul style="list-style-type: none"> - schedules require monitoring for BOD, SS and ammonia. • Surface Waters: <ul style="list-style-type: none"> - continuous for pH, TOC; - periodic for oils and visual checks. • Groundwater: <ul style="list-style-type: none"> - annual for pH, conductivity, oils and heavy metals. • Noise: <ul style="list-style-type: none"> - annually.

Germany	<ul style="list-style-type: none"> • Atmospheric Emissions: <ul style="list-style-type: none"> - continuous for NO_x, CO as well as on-line data passing to regulator. • Effluent: <ul style="list-style-type: none"> - not specified. • Noise: <ul style="list-style-type: none"> - report required.
Netherlands	<ul style="list-style-type: none"> • Atmospheric emissions: <ul style="list-style-type: none"> - EMS agreement. • Effluent: <ul style="list-style-type: none"> - pH continuous & EMS agreement. • Noise: <ul style="list-style-type: none"> - criterion specified.
Sweden	<ul style="list-style-type: none"> • Atmospheric emissions: <ul style="list-style-type: none"> - continuous for CO, NO_x, and O₂. - periodic for ammonia (if SCR is used).
United Kingdom	<ul style="list-style-type: none"> • Atmospheric emissions: <ul style="list-style-type: none"> - as outlined in condition 1.3.1 and with regard to Table 1.2 of permit submitted; - also (specifically) continuous NO_x and CO, pH, flow and temperature. • Effluent: <ul style="list-style-type: none"> - periodic for a range of other parameters (per Table 4.5 of permit permitted). • Noise: <ul style="list-style-type: none"> - every six months.

Section 7: KEY CONCLUSIONS FROM WORKGROUPS

- 7.1 The permits should be *precise* and *unambiguous*.
- 7.2 An Interpretation and Glossary of Terms should be included in the permits.
- 7.3 The Application may or may not be part of the permit.
- 7.4 All permits should require monitoring by the permitted facility and the Regulator should also carry out some monitoring.
- 7.5 All permits must meet National Legislation. Environmental agencies should influence governments when legislation is being set.
- 7.6 EMS may or may not be appropriate for all operators. The EMS reporting workload may cause problems for Inspectors but can play a vital role in an Improvements Programme. It contains advantages for permitted sites such as less frequent audits but should not replace major permit conditions. Some Member States make EMS obligatory while others encourage industry to use the EMS system.
- 7.7 The use of Schedules for the presentation of numerical information (e.g. ELV's or monitoring requirements) is desirable.
- 7.8 Not all MS deal with historical site contamination as part of an IPPC permit. Historical contamination information must be addressed in the application information and may be addressed in advance of the IPPC application.
- 7.9 Individual environmental media should be addressed under separate headings in the permit.
- 7.10 BREF documents will be very useful but should be used as guidance only.
- 7.11 Charges and fees will vary from MS to MS.
- 7.12 An integrated permit should be all embracing and cover all environmental media.
- 7.13 Penalties in the MS vary from €5 to €300,000 with possible imprisonment in some MS (Denmark, Germany and United Kingdom).
- 7.14 A clear definition is needed by what is meant in Directive 96/61/EC by 'Significant Pollution'.

Appendix 1:

ATTENDEES

1.1 Chair

Dr Ken Macken, Regional Manager, EPA
Mr Frank Clinton, Senior Licensing Inspector, EPA

1.2 Co-ordination and Support

Claire Fahy, Project Co-ordinator (contract)
Maura Ryan, Programme Officer, EPA

1.3 Speakers

Mr Iain Maclean, Director, EPA
Dr Ken Macken, Regional Manager, EPA
Mr Frank Clinton, Senior Licensing Inspector, EPA
Mr Paddy Nolan, Programme Manager, Licensing and Control, EPA

1.4 Participants

(a) Member States

<i>Austria</i>	Mr Andreas Binder
<i>Austria</i>	Mr Hellmut Pangratz
<i>Belgium</i>	Mr Robrecht Vermoortel
<i>Denmark</i>	Ms Christa Joergensen
<i>Denmark</i>	Mr Kurt Olsen
<i>Finland</i>	Ms Pirjo-Liisa Nurmela
<i>Germany</i>	Mr Mark Butt
<i>Germany</i>	Ms Gisela Holzgraefe
<i>Ireland</i>	Dr Maria Martin
<i>Ireland</i>	Ms Marie O'Connor
<i>Ireland</i>	Dr Gerry Byrne
<i>Italy</i>	Dr Gianfilippo Furrer
<i>Italy</i>	Dr Alfredo Pini
<i>The Netherlands</i>	Ms Jettie Andringa
<i>The Netherlands</i>	Mr Rob Kramers
<i>Northern Ireland</i>	Mr Ken Ledgerwood
<i>Portugal</i>	Mrs Isabel Santana
<i>Spain</i>	Ms Ana Rodríguez-Roldán
<i>Sweden</i>	Ms Gisela Köthnig
<i>United Kingdom</i>	Mr Colin Chiverton
<i>United Kingdom</i>	Mr Doug Munkman

(b) AC IMPEL

<i>Bulgaria</i>	Mrs Elisaveta Zgourovska-Raponska
<i>Cyprus</i>	Dr Aristodemos Economidas
<i>Cyprus</i>	Dr Stelios Georghiades
<i>Czech Republic</i>	Mr Borek Hanousek
<i>Estonia</i>	Ms Tiia Kaar
<i>Hungary</i>	Mrs Istvanne Csoknyai
<i>Latvia</i>	Mr Raimonds Vejonis
<i>Latvia</i>	Mr Vilis Avotins
<i>Lithuania</i>	Mr Domas Balandis
<i>Malta</i>	Mr Ray Camilleri
<i>Poland</i>	Ms Elzbieta Gnat
<i>Romania</i>	Mrs Carmen Dumitrescu
<i>Slovak Republic</i>	Mr Ivan Rajniak
<i>Slovenia</i>	Mr Dusan Pilcher

Appendix 2: WORKSHOP SCHEDULE

Workshop Day 1: Wednesday 12th April

<u>Time</u>	<u>Item</u>	<u>Chairperson</u>	<u>Speaker</u>
9.00 a.m.	Welcome & Opening of Workshop	Frank Clinton	Director
9.30 a.m.	Description of Workshop		Ken Macken
9.45 a.m.	Introduction of Participants		Frank Clinton
10.15 a.m.	IPPC Directive & Permitting		Paddy Nolan
10.45 – 11.15	<i>COFFEE BREAK</i>		
11.15 a.m.	Role of BREF (BAT Reference Documents)	Ken Macken	Frank Clinton
11.45 a.m.	Description of Fictitious Application		Ken Macken
12.15 p.m.	Requests for Additional Information		Frank Clinton
1.15 – 2.30 p.m.	<i>LUNCH</i>		
2.30 p.m.	Initial Comparison of Permits <ul style="list-style-type: none"> • Structure of the Permit • Air • Water • Waste • Noise • Site Contamination • Decommissioning • EMR and Light • Monitoring 	Frank Clinton	Frank Clinton/ Ken Macken
3.30 p.m.	<i>COFFEE BREAK</i>		
4.00 – 6.00 p.m.	Formation of Workgroups		Frank Clinton
6.00 p.m.	END OF DAY 1		
7.30 p.m.	<i>EVENING MEAL</i> - Cooper's Restaurant 62 Lower Leeson Street, Dublin 2		

Workshop Day 2: Thursday 13th April

<u>Time</u>	<u>Item</u>	<u>Chairperson</u>	<u>Speaker</u>
9.00 a.m.*	Rapporteur Reports of Workgroup Topics (1)	Ken Macken	Rapporteur
	<i>* Key conclusions to be taken from Rapporteurs at 9.00 a.m.</i>		
10.30 – 11.00	<i>COFFEE BREAK</i>		
11.00 a.m.	Rapporteur Reports of Workgroup Topics (2)		Rapporteur
12.00 p.m.	Overview of Key Conclusions (Similarities and Differences)	Frank Clinton	Ken Macken
12.45 p.m.	Wrap-Up – Announce Details of Feedback		
1.00 p.m.	Close		Director
	<i>LUNCH</i>		

Appendix 3: WORKGROUPS

Workgroup	Status	Country	First Name	Surname	Location
1	MS	AUSTRIA	Andreas	Binder	<i>Elgin Room Burlington Hotel</i>
1	MS	ENGLAND	Doug	Munkman	
1	MS	BELGIUM	Robercht	Vermoortel	
1	MS	DENMARK	Christa	Jorgensen	
1	MS	GERMANY	Gisela	Holzgraefe	
1	AC	BULGARIA	Elissaveta	Zgourovaska-Raponska	
1	AC	CYPRUS	Aristodemos	Economidas	
1	AC	LATVIA	Raimonds	Vejonis	
1	AC	MALTA	Ray	Camilleri	

Workgroup	Status	Country	First Name	Surname	Location
2	MS	ITALY	Gianfilippo	Furrer	<i>Elgin Room, Burlington Hotel</i>
2	MS	AUSTRIA	Hellmut	Pangratz	
2	MS	FINLAND	Pirjo-Liisa	Nurmela	
2	MS	PORTUGAL	Isabel	Santana	
2	MS	IRELAND	Maria	Martin	
2	AC	SLOVENIA	Dusan	Pichler	
2	AC	POLAND	Elzbieta	Gnat	
2	AC	LITHUANIA	Domas	Balandis	
2	AC	CYPRUS	Stelios	Georghiades	

Workgroup	Status	Country	First Name	Surname	Location
3	MS	NETHERLANDS	Jettie	Andringa	<i>Waterloo Room, Burlington Hotel</i>
3	MS	NORTHERN IRELAND	Ken	Ledgerwood	
3	MS	GERMANY	Mark	Butt	
3	MS	SPAIN	Ana	Rodríguez	
3	MS	ITALY	Alfredo	Pini	
3	AC	ESTONIA	Tiia	Kaar	
3	AC	CZECH	Borek	Hanousek	
3	AC	ROMANIA	Carmen	Dumitrescu	

Workgroup	Status	Country	First Name	Surname	Location
4	MS	NETHERLANDS	Rob	Kramers	<i>EPA offices</i>
4	MS	ENGLAND	Colin	Chiverton	
4	MS	SWEDEN	Gisela	Köthnig	
4	MS	IRELAND	Maire	O'Connor	
4	MS	DENMARK	Kurt	Olsen	
4	AC	HUNGARY	Istvanne	Csoknyai	
4	AC	SLOVAK REPUBLIC	Ivan	Rajniak	
4	AC	LATVIA	Vilis	Avotins	

Appendix 4: FEEDBACK SUMMARY

Member States: 21 participants, 16 responses

AC IMPEL: 14 participants, 13 responses

<i>Question</i>		Member States			AC IMPEL		
		<i>Yes</i>	<i>No</i>	<i>Other</i>	<i>Yes</i>	<i>No</i>	<i>Other</i>
Q1	Do you think the IPPC workshop has been useful?	16	-	-	13	-	-
Q2	Are you currently involved in environmental permitting in your country?	14	2	-	10	4	-
Q3	Do you think the approach to environmental permitting in your country is similar to that in other countries?	11	4	1 Y/N	7	3	3
Q4	Do you consider that BREFs are important in environmental permitting?	13	3	-	11	1	1 D/K
Q5	Were you satisfied with the documentation provided?	16	-	-	13	-	-
Q6	Were you satisfied with the presentations made?	16	-	-	13	-	-
Q7	Were you satisfied with – (a) the Workshop organisation? (b) the Hotel accommodation and meals? (c) the Restaurant menu? (d) The Workshop venue?	15 15 16 16	1 1 - -	- - - -	13 13 13 13	- - - -	- - - -
Q8	Did you find involvement in the Workgroups useful?	6	-	-	12	-	1 N/A
Q9	How will the Workshop influence IPPC permitting in your country?	Open-ended (see page 34)					
Q10	What recommendations would you make to the MS to improve the quality of IPPC permits in the EU generally?	Open-ended (see page 34)					

Y/N = yes and no

D/K = don't know

N/A = no answer

Q9 How will the Workshop influence IPPC permitting in your country?

Main Comments
<ul style="list-style-type: none"> • Good examples discussed in the Workshop will be referred to in the future in the drawing up of IPPC permits. • Comparison of permits helps develop a clearer view of what should be included and allows a common approach to be adopted. • Very useful to see how other MS approach the same issue; allows inclusion of the best ideas from other Ms. • Allowed new insights into interpretation of IPPC. • The Workshop provided ideas which will help to inform the final shape and lay-out of new IPPC permits.

Q10 What recommendations would you make to the MS to improve the quality of IPPC permits in the EU generally?

Main Comments
<ul style="list-style-type: none"> • Definition of “insignificant pollution” is required. • Permits should be accurate, precise and enforceable. • Must be tailored to local circumstances and national legislation. • MS should adopt a totally integrated approach. • Checklists should be used to ensure that all issues addressed in the Directive are also covered in the new permits. • MS should be encouraged to produce a single, stand-alone inclusive permit. • An EU-wide methodology could be developed for cross media impact assessment. • Additional discussions would be useful, specifically a Workshop on “Guidance on making a good application for an IPPC permit”. • Implementation review after two years should be carried out.