

Integrated Pollution Prevention and Control (IPPC)

A guide for Primary Care Trusts and Local Health Boards

Volume 2: Responding to IPPC applications

Chemical Hazards and Poisons Division

Version 1.0

September 2004



Executive summary

Consultation on applications made under the Integrated Pollution Prevention and Control (IPPC) and associated regimes covered by the Pollution Prevention Control (PPC) Regulations are both a responsibility and an opportunity for Primary Care Trusts (PCTs) and Local Health Boards (LHBs). As a statutory consultee, the National Health Service is formally involved in the process of environmental regulation and this process offers an opportunity to influence the management of the environment to minimise or prevent adverse health effects. This relationship between the regulatory and public health communities clearly puts public health at the heart of IPPC. It is an important responsibility with major implications for the public, consultee, Regulator and industry alike. As a result National Health Service input must be both appropriate and add value to the process. PCTs and LHBs are uniquely placed to offer expertise, information and interpretation not available to the Regulators.

To maximise the value of this resource, PCTs and LHBs need to recognise the limits of their competence and be able to assess the often weighty and highly complex material presented to them for comment. On occasions the sheer volume of demand or the particular complexity of specific applications will require a level of expertise not ordinarily available within a PCT or LHB. The National Health Service has responded by the development of a network of relationships with the Health Protection Agency, National Public Health Service of Wales, academic departments and others designed to meet local need.

The National Health Service cannot meet its obligations in isolation. A successful response is predicated by developing a robust relationship with the Regulator. This has potential beyond IPPC with increased mutual understanding of roles, responsibilities, resources and limitations and also the potential for further joint working. In addition, successfully responding to IPPC will help PCTs and LHBs meet other public health responsibilities.

The Regulator and industry are right to expect a consistent and reasoned response from the National Health Service. The public is also right to anticipate that the PCT or LHB will efficiently and effectively identify and respond to any public health issues. These will not invariably be negative. The fact that a process or proposal does not cause public health concern is very important to public confidence.

The guidance reflects a consensus between the key agencies and is offered by the Health Protection Agency as a key part of the support available to PCTs and LHBs. It aims to encourage a consistent and appropriate response to all types of IPPC applications and will be updated and amended as all partners in IPPC learn more about the process and each other.

About this guide

This Guide is produced by the Chemical Hazards and Poisons Division of the Health Protection Agency and aims to help the statutory consultees for health in England and Wales fulfill their responsibility under the Pollution Prevention and Control Regulations. It briefly describes the fundamentals of IPPC, sets out the reasons for the involvement of the National Health Service and recommends a basic framework for response.

Whilst the PPC Regulations cover three closely related pollution control regimes, this Guide focuses principally on IPPC. Those small industries that are regulated under Local Authority Pollution Prevention and Control have less capacity to pollute and do not take an integrated approach to environmental protection (only covering air pollution). However, many of the issues raised in this Guide may apply to such industries although a distinction is made between these industries and those regulated under IPPC.

The Guide is not intended to replace existing guidance on IPPC or explain the legal provisions of IPPC. It attempts to explain why PCTs and LHBs should respond and how this statutory consultee role fits in with their broader public health responsibilities. It also explains what the consultee can expect to see in an application from a health perspective and suggests strategies for response. However, it is not intended to be prescriptive and the range of industries covered under IPPC, and specific local concerns, make it impossible to identify every health issue that may need consideration. A consistent theme throughout is the need to manage this responsibility efficiently.

The majority of PCTs or LHBs will receive considerable support from other agencies in responding to IPPC. To reflect this, this guidance has been split into two distinct volumes. Volume 1 is aimed principally at the PCT or LHB and provides background to IPPC and explains the role and responsibilities of the statutory consultee role. Volume 2, is aimed principally at those people involved in the actual response, be it PCTs or LHBs, their consultants or a combination of both (in this section the terms PCTs or LHBs can be taken to include their consultants). This Volume sets out the core competencies needed to review IPPC applications, the basic elements of a response and suggests a format for the final response. It also includes relevant appendices and a glossary. There is also a summary of key points at the end of each section.

The Guide has been written after discussions with representatives from the National Health Service, Environment Agency, Local Authority and Health Protection Agency (HPA). The Guide also reflects experience and lessons learnt to date from the IPPC regime.

About Volume 2

This Volume is aimed at the responders and explains what skills are required to respond to IPPC applications, the basis of a response and recommends a format for responding.

A general introduction to IPPC together with a description of the roles and responsibilities of the statutory consultee for health can be found in Volume 1.

Consultation Period:

The Guidance has already gone through a consultation process but this is intended to be a living document and as such will be updated to take into account any amendments to the PPC Regulations or changes to the consultation process. All comments are welcome and should be sent to:

Andrew Kibble
Health Protection Agency
Chemical Hazards and Poisons Division (Birmingham)
Room G08
Public Health Building
University of Birmingham,
Birmingham
B15 2TT

Tel: 0121 414 6547

Fax: 0121 414 3360

Email: andrew.kibble@hpa.org.uk

Table of contents

Volume 2: Responding to IPPC applications

Executive summary.....	1
About this guide	2
About Volume 2	3
Consultation Period:.....	3
Table of contents	4
Key Points.....	5
1 Getting Support.....	6
2 Preparing for the application	9
3 Responding.....	14
4 Recommended Format of Response	26
5 How will the Regulator deal with your concerns?.....	31
6 Conclusion and Future Issues.....	34
GLOSSARY	38
Appendix 1: References and key literature	44
Appendix 2: Statutory Consultees.....	46
Appendix 3: Current support arrangements and key contacts	47
Appendix 4: Relevant Environmental Standards and Pollutants	52

Key Points

Where to find details of:

	Paragraph no.
Skills:	1.2
Getting support:	1.3
Responsible person	2.2
Developing relationships with the Regulator:	2.6
Key actions when preparing for an application:	2.9
What you should comment on:	3.2
Health impacts:	3.3
Identifying local health issues:	3.4
What you should not comment on:	3.7
How to respond:	4.1
Risk communication:	4.4
How the Regulator will deal with your comments:	5.2
Training:	6.3
Auditing and performance review:	6.4

1 Getting Support

1.1 Do you need support?

- 1.1.1 Whilst the statutory consultee role should be seen as a real opportunity to address environment and health issues, it should not be a drain on the resources of the Primary Care Trust (PCT) or Local Health Board (LHB). However, experience to date has shown that IPPC can, and does, present a range of difficulties. Applications can be very large, highly technical and cover areas as diverse as air dispersion modelling, water pollution, contaminated land and communicable disease issues. Some will contain complex environmental data, which may require appropriate interpretation from a health perspective. As a result, one of the major concerns when reviewing IPPC applications is the need to understand a range of issues relating to environmental pollution and health. The types of skills needed to review applications may include knowledge of environmental chemistry, risk assessment methods, toxicology, environmental and health standards, and, occasionally, epidemiology. Most PCTs and LHBs will simply not possess all the necessary expertise in-house and, where necessary, they will need to access skills and advice from outside agencies.
- 1.1.2 As a result, PCTs and LHBs will need support and advice to help them fulfil their consultee role and many have already developed relationships with other agencies to obtain appropriate support. This section intends to highlight the skills needed and suggest how the consultee goes about obtaining such support.

1.2 What skills do you need access to?

- 1.2.1 Based on the content of applications and experience to date, it is clear that a range of skills is needed in order to respond appropriately and effectively. Necessary skills should include:
- An understanding of environmental chemistry and pollution.
 - An understanding of toxicology, including methods of assessing risk.
 - Public Health.
 - Epidemiology.
 - An understanding of (and access to) local health data and surveillance.
 - An ability to communicate risk, to put risk into context and to distinguish between hazard and risk.
- 1.2.2 Furthermore, all those individuals and agencies involved in the statutory consultee's response (PCTs, LHBs or their consultants) must have the following:
- A good working knowledge of the IPPC regime and other relevant environmental legislation.

- Good relationships with the Regulator.
 - The ability to provide timely and appropriate advice.
 - Flexibility, including an ability to deal with surges in applications.
- 1.2.3 It is important that each application be judged on its merits. Some applications will require little or no input from external agencies whereas some will require considerable support e.g. controversial or politically sensitive applications, applications containing considerable technical information etc.

1.3 Getting support

- 1.3.1 Whilst some PCTs and LHBs have the ability to respond in-house to most, if not all, aspects of an IPPC application, the majority have or are planning on developing relationships with outside agencies for specific advice. Since the introduction of IPPC, PCTs and LHBs (and health authorities/health boards before) have developed a variety of relationships with academic departments, other public health professionals such as Health Protection Units (HPUs), environmental consultants and the former chemical regional service provider units (RSPUs), such as CIMSU (Wales), CIRS (London) and CHMRC (Birmingham) (see Glossary). These RSPUs are now part of the Health Protection Agency (HPA), which is becoming a very important source of advice and support for PCTs and LHBs in England and Wales. In England, many PCTs have discharged their responsibility regarding IPPC to the Health Protection Agency.
- 1.3.2 As a result there have been a number of solutions to the issue of responding to IPPC applications and a number of different support structures exist, with varying degrees of involvement, in England and Wales. It is not the purpose of this guidance to recommend one particular structure over another but to highlight the fact that resources are available to help PCTs and LHBs respond to IPPC applications.
- 1.3.3 Most support structures are at a regional or supra-regional level. Many PCTs in England have used their links with the HPA to obtain advice and expertise. For example, the Chemical Hazards and Poisons (CHAP) Division can provide support on areas such as environmental chemistry, risk assessment and toxicology. Furthermore, support may be available from public health professionals in HPUs or from specific chemical and environmental teams, both of which are located in the Local and Regional Services (LARS) Division of the HPA. In Wales, LHBs have developed an arrangement with the National Public Health Service, which together with the Welsh Centre of the CHAP Division helps LHBs respond to IPPC. This relationship is clearly detailed in the relevant Welsh Guidance on IPPC (UWIC, 2003). Elsewhere, PCTs have developed relationships with academic departments, particularly those departments specialising in public and environmental health issues. Details of the various agencies currently providing support in England and Wales are given in Appendix 4.
- 1.3.4 Ultimately each PCT and LHB is responsible for identifying what support, if any, they need and where to get it. If a PCT or LHB has not developed suitable

arrangements with outside agencies, it is recommended that they undertake a strengths, weaknesses, opportunities and threats (SWOT) type analysis of what they could reasonably do in house and what support they require. If a PCT believes that they may need additional advice, it is recommended that they speak with neighbouring PCTs with the view of developing a regional service or to see whether they have already developed a successful solution to IPPC. Regional services have obvious benefits in terms of dealing with the Regulator who may be based at a regional or supra-regional level (e.g. Environment Agency Strategic Permitting Groups) and also in terms of developing a cost and resource effective service. Whatever structure is put in place, it needs to be routinely reviewed and assessed in terms of performance and quality assurance. The HPA can offer advice on setting up such relationships.

1.4 Summary of key points

- IPPC should not be a drain on the resources of a PCT or LHB.
- Support and advice is available from a range of sources in England and Wales.
- Whoever provides support must be able to offer a range of skills and expertise, be familiar with the IPPC regime and be able to deal with surges in demand.
- Regional or supra-regional teams are considered to be the most effective means of supporting PCTs or LHBs.

2 Preparing for the application

2.1 Introduction

- 2.1.1 Once notified of an application, statutory consultees have 28 days to respond. This is an extremely tight deadline, which may be difficult to achieve in periods of high demand. This, together with the fact that applications can be extremely large and very technical, means that IPPC can be very resource intensive. However, there are a number of ways that a PCT or LHB can prepare for IPPC and so reduce the impact of applications and make the 28-day deadline more manageable.

2.2 The responsible person

- 2.2.1 Since IPPC is a new responsibility it is important that a PCT or LHB identify someone who will be responsible for coordinating their response. This may entail identifying what expertise is needed, where to obtain support, ensuring that relevant timescales are met, and dealing with the Regulator and other interested parties. Typically this responsible person should be the Director of Public Health but many PCTs have also identified colleagues outside PCTs to fulfil this role, e.g. Consultants in Communicable Disease Control (CCDCs) within Health Protection Units may take the role as a responsible person for several PCTs.
- 2.2.2 PCTs and LHBs should be aware of the tight deadlines imposed, and have a mechanism in place for recognising the incoming application, and directing it in an appropriate manner. This must include the ability to respond even if the person with the authority to “sign-off” a response is absent.
- 2.2.3 Key areas of responsibility should include:
- Coordination and management of the overall PCT and LHB response.
 - To identify and assess the capability to respond.
 - To identify and assess capacity and resource issues.
 - To be a point of contact with the Regulator and other interested parties (e.g. other statutory consultees, the media, local people and pressure groups etc).
 - To ensure the response is timely and appropriate.
 - To develop, implement and maintain appropriate management systems.
 - Performance review and quality control and assurance.
- 2.2.4 This person(s) must be familiar with the IPPC process, and be provided with sufficient time and authority to discharge these duties effectively. It is important that when this person is absent, another member of staff takes responsibility for any applications that are sent to the PCT.

2.3 Familiarisation with available guidance

- 2.3.1 There is a great deal of guidance available to applicants. Most is concerned with helping the applicant complete the IPPC form and provide the appropriate data to the Regulator. Therefore, much of it is not directly relevant to the consultee, as it is not their responsibility to ensure that the application is properly completed.
- 2.3.2 However, there is some general guidance, which should be consulted prior to an application. Of particular importance is DEFRA's Practical Guide which summarises the key aspects of the IPPC regime (DEFRA, 2002). This guide is available electronically at <http://www.defra.gov.uk/environment/ppc/ippcguide/contents.htm> .
- 2.3.3 The Environment Agency has also produced much general and technical guidance for applicants. They have produced a series of Cross Sector (Horizontal) Technical Guidance, which affects all industrial sectors and covers issues such as environmental assessment, and appraisal of BAT (Horizontal Guidance Note H1), noise (Horizontal Guidance Note H3) and odour (Horizontal Guidance Note H4). Again, guidance is freely available on the internet (www.environment-agency.gov.uk/business/).
- 2.3.4 If a PCT or LHB knows what type of applications are expected, then identifying and reviewing relevant sector specific guidance in advance will be helpful. Such guidance may help identify key pollutants, the methods that may be used by the applicant to assess risk, best practice, possible health issues and even the likely response from the general public (e.g. incinerators would be expected to generate considerable concern). Sector specific guidance is also available on the Environment Agency web-site (see above).
- 2.3.5 Further details of all relevant guidance and where to obtain it is given in Appendix 1.
- 2.3.6 It is also important to appreciate that such information remains guidance. It is not prescriptive and many operators will not follow particular guidance. This is acceptable providing they justify their approach and demonstrate that the relevant issues set out in the guidance have been properly addressed

2.4 Develop Management Systems

- 2.4.1 Effective management systems are needed to ensure that a PCT or LHB discharges their statutory consultee role effectively. Systems need to be in place to manage the administration aspects of IPPC, which may be considerable. The application and all documentation relating to the application needs to be logged upon receipt and tracked until the Regulator has completed the determination period. Since PCTs and LHBs only have 28 days to comment, it is important that they acknowledge receipt of the application, confirm the closing date for consultation and ensure that the relevant people have access to the application.
- 2.4.2 Similarly when more than one person or agency is involved in reviewing IPPC applications, a good management system will ensure that such work is coordinated and consistent and that the final response is fully accepted by all.

2.5 Quality Assurance and Performance Review

- 2.5.1 The PCT must have confidence in their response, particularly since it will be placed on the public register and could be used as a basis for refusing an application, or for requesting further information from the operator. The operator may challenge the Regulator's decision and this in turn may result in a challenge of the health response. Similarly the Regulator may ask the PCT or LHB to justify a particular question or concern.
- 2.5.2 As a result, a PCT or LHB must have confidence in the quality of their response and a quality assurance system needs to be in place to ensure this. Quality assurance can be as simple as ensuring relevant targets and timescales are met, to ensuring that each response is consistent and based on sound science. It will also improve efficiency by ensuring that the correct skills are used for appropriate parts of the application.
- 2.5.3 All responses should be routinely reviewed and some form of performance appraisal is strongly recommended. Feedback from the Regulator should also be sought and used to update quality assurance procedures.

2.6 Developing relationships with the Regulator and other consultees

- 2.6.1 It is important to develop mutual understanding and operational links with the Regulator and other statutory consultees such as the local authority (where the Environment Agency is the Regulator). PCTs and LHBs should see their role as one of sharing information with other agencies. Similarly if they speak with the Regulator, they may be able to identify common areas of interest and avoid duplication of work. The Regulator may also be able to provide useful information on the likely date of receipt of an application and provide an indication of the likely demand. They may also be able to offer a view on the likely problems a PCT or LHB may expect to see with a particular installation or sector, or inform them of any particularly controversial applications. This may allow the consultee to carry out preparatory work prior to actual receipt of the application.
- 2.6.2 Close links with other consultees is also encouraged. For example, the Food Standards Agency may be able to provide reassurance that a particular installation will not affect local food-chains, whilst local authorities will have considerable expertise in air quality, contaminated land and noise.
- 2.6.3 It is recommended that the PCT and LHB should:
- Regularly speak or meet with the Regulator and other consultees.
 - Request information on likely date of receipt.
 - Request information on anticipated numbers.
 - Request information on the type of industries expected to apply.

- 2.6.4 Furthermore, the Regulator will be sympathetic to any difficulties you may have in meeting the deadline or may be able to inform you of any likely extensions to the determination period.

2.7 Review access to, and quality of, routinely available health data and surveillance

- 2.7.1 Regardless of IPPC, PCTs and LHBs should have access to a range of health and demographic data. Before receiving IPPC applications, PCTs are recommended to review the availability of such data and to assess its quality and appropriateness. This will help with any examination of local health issues. The importance of health and surveillance data is discussed in detail in Section 3.6.

2.8 Familiarisation with local area/local industrial landscape

- 2.8.1 One of the key responsibilities of the statutory consultee is to place the installation and its emissions into a local health context. This role can be greatly aided by having a good knowledge of the local area. Whilst all PCTs and LHBs should understand the health of their local population, familiarisation with the geography, environment and industrial landscape would be greatly beneficial. For example, the installation applying for a permit may be only of a number of industries in the local area. This assessment of the “landscape” may result in consideration of:
- Demographics of the local area.
 - Other sources of pollution, other industries, traffic etc.
 - Key receptors e.g. sensitive members of the population, hospitals, allotments, nursing homes, schools, agricultural land and water courses.
 - Sources of drinking water sources e.g. private or public water supplies including boreholes, and local abstraction points for industry, food, agriculture.
- 2.8.2 The local authority will be able to help the PCT understand many of these issues. For example, local authorities will hold valuable information on air quality (through their local air quality management strategies), contaminated land, records of nuisance complaints such as noise or dust etc. The Environment Agency will also be able to provide information on the local industrial landscape e.g. their web-site “What’s in Your Backyard” gives on-line access to the Agency’s environmental data (http://216.31.193.171/asp/1_introduction.asp). Open dialogue with local authorities may also help prevent duplication in the response.
- 2.8.3 For some applications, particularly those that are contentious, it is recommended that the PCT and/or their consultants arrange with the Regulator a visit of the site.

- 2.8.4 Prior knowledge would reduce the time needed to review an application and would also help PCTs to fulfil their other broader public health responsibilities.

2.9 Summary of key points

- PCTs and LHBs are encouraged to prepare for IPPC in advance of receiving an application.
- A person responsible for IPPC should be identified with a named deputy to cover absence.
- A management system should be developed to help PCTs and LHBs manage applications.
- Quality control and assurance is essential.
- Regular contact with the Regulator and other statutory consultees is strongly encouraged.
- A PCT or LHB should be familiar with the local industrial landscape.
- A PCT or LHB should review their access to local health and demographic data.

3 Responding

3.1 Introduction

- 3.1.1 There are several views on how, and to what extent, a PCT and LHB should respond. Experience in England and Wales and feedback from the Regulator (both the Environment Agency and local authorities) suggests that, on occasion, PCTs, LHBs and their consultants have been unfamiliar with the consultee role, have duplicated the work of the Regulator or failed to address those issues that the Regulator considers most important.
- 3.1.2 One of the problems has been the absence of formal guidance on how to respond and many parts of the UK have developed different mechanisms for responding. However, all share basic characteristics and most PCTs and LHBs raise the same type of questions when dealing with the same types of industry. This section is intended to set out the basic elements of a response rather than advocate a particular approach. However, whilst it is recognised that solutions need to be developed that reflect local needs, it is important to ensure both quality and consistency in the final response.
- 3.1.3 The primary reason why PCTs and LHBs are consulted is that they can bring unique information to the permitting process and offer an interpretation that may not be available from any other source. Their broad public health responsibilities and access to, and use of, routine health and demographic data make it uniquely placed to comment **independently** on the aspects of the application which are relevant to human health.
- 3.1.4 PCTs and LHBs should see their role as ensuring that a high level of health protection is achieved. It is not their role, nor should it be, to undertake part or all of the risk assessment that is needed to demonstrate protection. They may, however, suggest how such an assessment should be done e.g. identify susceptible populations that may need to be considered. Furthermore PCTs and LHBs should also see their role as providing reassurance to the local community.
- 3.1.5 From the Regulator's viewpoint, PCTs and LHBs contributions are valuable because they:
- Provide information on an area outside of their core expertise.
 - Provide an independent view on potential health impacts.
 - Add credibility to the PPC process.
 - Will be aware of local health issues and concerns.
 - Are advocates of the health of the local population.
 - Can play a central role in communicating health risks to the public.
 - Enable the regulatory decision to be based on an understanding of current health impacts of pollution.

- Help develop mutual understanding and operational links.

3.1.6 Fundamentally IPPC provides an opportunity to offer a health perspective on the permitting of industry and, in the case of new processes, to be able to offer a view in anticipation of potential public health effects.

3.2 What you should comment on?

3.2.1 It is important to appreciate that it is the operator's role to assess the potential risks of their operations and to demonstrate that they achieve a high level of protection for the environment. The statutory consultee is not required to undertake its own risk assessment, but use the information provided in the application to offer a public health opinion of the installation. If a consultee believes that the application lacks sufficient data to demonstrate this, they should simply ask the Regulator to consider requesting it.

3.2.2 It is widely accepted in the public health community and by the Regulator that the statutory consultee response should consist of four key elements:

1. To offer a view on the **potential health impact of emissions and activities** of a particular installation (based on the information provided in the application) and to place any risks into a local context, e.g. does the operator demonstrate a high level of protection for human health? This may also include consideration of the level of a public health nuisance reported in relation to the installation. This part of the response may draw attention to the need for further environmental monitoring to help the Regulator assess potential problems or gaps in the application.
2. To identify any existing **local health issues** that may be associated with the installation or its location, e.g. are there any local health problems that could be related to, or exacerbated by, the installation.
3. To identify any **future health issues** that could be associated with the installation or its location, e.g. are there any problems or issues on the horizon that the Regulator needs to take into consideration.
4. To provide **reassurance** to the local community including reassurance that an installation will not present a significant risk to human health.

3.2.3 In all cases, the response should be based on sound science. Subjective views or comments should be avoided at all times unless supported by evidence or data.

3.3 Impact of emissions and activities

3.3.1 The operator should demonstrate that they achieve a high level of protection for human health. This should be done through some form of risk assessment, based on actual data and information or, where unavailable, predicted values. It is expected that the applicant will use a screening tool, such as H1 (Environment Agency, 2003), to make an initial assessment of releases and determine whether

a more detailed risk assessment is required. Whatever the format of the assessment, the statutory consultee should expect operators to use the basic source – pathway – receptor framework and to have considered human health within the application.

Source

- 3.3.2 The PCT and LHB should expect to see all sources of pollution identified and quantified in some way. This should not only include authorised releases to the environment (e.g. emissions to air or water) but also any unauthorised emissions (e.g. fugitive releases of dust from stockpiles, fugitive releases from vents or the potential of releases from accidents etc). The application should contain information on the types of pollutants and their likely concentration and distribution in the environment.
- 3.3.3 The operator should describe all sources using actual data or, where unavailable, from predicted values. Data should be as comprehensive as possible and up to date, e.g. data from a stack-monitoring programme undertaken three years earlier may have little relevance to current or future emissions. In the absence of actual data, any predicted values should be derived from tools and models (e.g. screening tools, air dispersion modelling) that are recognised as acceptable for this particular purpose. The methods used for predicting such values should be clearly explained. The PCT or LHB is not expected to understand the technicalities of, for example, dispersion modelling, but sufficient information should be provided to ensure that the consultee is confident that the predictive values are realistic.

Pathways

- 3.3.4 The application should help the PCT and LHB understand how local people (receptors) will be exposed to the pollution (sources) from the installation. Examples of pathways include inhalation of vapours or dust, contact with contaminated soil, consumption of contaminated drinking water. Again, it is the responsibility of the applicant to identify all possible exposure pathways but PCTs and LHBs may want to check the appropriateness of these pathways and perhaps suggest others that may have been omitted or poorly considered.

Receptors

- 3.3.5 The application should help the PCT and LHB appreciate who may be exposed to emissions from the installation. Whilst it is the responsibility of the applicant to identify the most likely receptors, they may not have sufficient knowledge to accurately identify the most sensitive human receptors (e.g. people with pre-existing disease, the young, the elderly etc) in the local area. This requires local knowledge and PCTs and LHBs have an important role in ensuring that the most relevant receptors have been considered.

Risk Assessment

- 3.3.6 Once suitable source-pathway-receptor models have been identified, the operator is required to provide an environmental (including human health) assessment of their releases. This assessment should focus on both direct and indirect effects of all emissions. The operator should identify and quantify releases to the environment and, where appropriate, quantify their effects (DEFRA, 2003). Most attention should be paid to large-scale releases and releases of the more hazardous pollutants (DEFRA, 2003).
- 3.3.7 However, there is no clear guidance for the operator on how to assess the risk from their installation. As a result, applications may contain a variety of different ways of assessing risk from the use of initial screening tools to predict the likely impact of releases (e.g. H1) to detailed plume dispersion modelling. Applicants may also use simple qualitative risk assessments to identify and qualify sources, pathways and receptors in terms of likely severity of outcome (e.g. high, medium or low risk). However, there are a number of basic concepts that PCTs and LHBs should expect to see within an application.
- Demonstration that the application of BAT prevents or reduces emissions and limits the impact of the installation on the environment and human health.
 - Consideration of other sources of pollution, including consideration of background levels of pollution.
 - Quantification of “high risk” outcomes. If a qualitative risk assessment suggests that the outcome to receptor A exposed by inhalation to substance X is high or severe, more detailed assessment is required.
 - Where environmental management systems are in place, evidence that they help ensure that pollution is minimised, reduced or prevented.
- 3.3.8 The most usual approach to assess the impact of emissions is for the applicant to make use of industry and/or environmental standards or other benchmarks to judge the relative impact of a release in determining IPPC applications. Data (actual or predicted) on stack emissions may be compared against prescribed emission limit values (ELVs) whilst data on predicted ground level concentrations in the environment should be compared against relevant environmental quality standards (EQS) such as air quality standards (see Glossary).
- 3.3.9 One of the inherent problems encountered by applicants and the Regulator are the lack of relevant health based standards. There are surprising few standards or other benchmarks against which to judge the relative impact of a release in determining IPPC applications. For example, there are only 31 recognised ambient human health air standards, as set by UK Expert Panel on Air Quality Standards (EPAQs), the European Union or WHO. The United States Environmental Protection Agency also sets Air Quality Standards but only one is in addition to the 31 mentioned above (PM_{2.5}). To address this, the EA has consequently developed environmental criteria termed Environmental Assessment Levels (EALs) for use in its IPPC assessment methodology (H1). These are non-statutory guideline values and, in theory, represent a no-effect or a low-level effect for threshold substances and non-threshold substances respectively.

- 3.3.10 The majority of EALs are derived from UK Occupational Exposure Standards (OES) through the application of uncertainty factors to allow for differences between occupational exposure and general population exposure in ambient air. While this is a long established and respectable methodology, there are some problems with the extrapolation of occupational values to ambient values. Some OES take account of technical issues (e.g. levels of detection), the health effect of concern in ambient exposure may be different and different uncertainty factors may be more appropriate for different substances. As a result, EALs should not be seen as wholly protective of human health and this Guide recommends that the limitations of these guidelines be taken into account by both the statutory consultee and the Regulator when used in the assessment process.
- 3.3.11 Given such limitations, any exceedences of an EAL should be viewed as unacceptable. Furthermore, any increases in non-threshold substances from marginal levels to just below the EAL may actually need serious public health judgement especially if the local population is particularly sensitive.
- 3.3.12 In terms of their significance to health, this Guide recommends that the applicant and Regulator adopts the following hierarchy when assessing the public health impact:
1. Comparison of predicted ground level concentrations or appropriate ambient air concentrations against UK recognised health based environmental standards or guidelines such as the standards set by the UK Expert Panel on Air Quality Standards (EPAQS), the European Union or the WHO Air Quality Guidelines for Europe (see Appendix 4)
 2. Comparison of predicted ground level concentrations or appropriate ambient air concentrations against other international standards e.g. standards and guidelines from the United States or other European countries. The methodology and aim of these standards should be understood.
 3. Comparison of predicted ground level concentrations or appropriate ambient air concentrations with EALs.
 4. Comparison of stack emissions with ELVs.
 5. Expert opinion based on existing good industry practice or current regulatory practice.

In, all cases, the assessment should be underpinned by assessment of the site-specific circumstances and local conditions.

- 3.3.13 The HPA strongly supports the use of relevant background data when assessing the impact of emissions on the environment. It is important that the applicant place their emissions into a local context so that a judgement of the overall exposure to a substance can be made. As a result, this Guide strongly endorses the Environment Agency's H1 assessment tool, which helps the applicant consider the impact of their emissions in relation to existing pollution levels. The HPA is reassured that, properly conducted, H1 is a useful mechanism for assessing the impact of proposed emissions to the environment including human health and in determining whether a more detailed assessment is required. However, the statutory consultee must be confident that the H1 assessment has been correctly performed and that appropriate data has been used to estimate both the process contribution and the likely background level of pollution. As a

result, the consultee should expect the applicant to justify emission rates used throughout the H1 assessment.

- 3.3.14 As discussed in section 1.5 in Volume 1, A(1) and A(2) installations have a far greater capacity to pollute than Part B installations. As a result for a Part B installation the use of H1 would only be required in exceptional circumstances.
- 3.3.15 The Regulations require that permits are only issued where, broadly, the Regulator is satisfied that the operator is applying BAT to ensure protection of the environment, and that the operation of the installation will not breach Environmental Quality Standards (EQS) such as National Air Quality Standards (see Appendix 4). Occasionally existing levels of air pollution without the contribution from the process under consideration may already be sufficient to breach air quality standards. In such cases, it is possible that a permit may be issued if the contribution to the total level of pollution is very small when compared to other sources e.g. traffic related pollution.
- 3.3.16 Many applicants will simply compare stack emissions with relevant sector-specific ELVs. Without consideration of background air pollution, such a comparison has limited public health value. Where such an assessment has been undertaken, it is recommended that the Regulator consider asking the applicant to place their emissions into a local context or confirm that emissions are not significant in terms of local air quality. At all times, the Regulator should be prepared to confirm that sector specific ELVs are appropriate for the local setting.
- 3.3.17 Whatever the form of the risk assessment, PCTs and LHBs should be able to see what the sources of pollution are going to be, who will be exposed and how will they be exposed. They should also expect to see all statements relating to the risks from emissions to be supported with appropriate information or data. Unsupported statements relating to health issues should be queried.
- 3.3.18 If the PCT or LHB is concerned about the validity of data (actual or predicted) they should, if time allows, speak with the Regulator, who may be able to offer a view on the appropriateness of the data. However, the 28-day consultation period may make this difficult. Furthermore it is likely that the consultee will be reviewing the application at the same time as the Regulator who may not yet have considered this issue. If an informal discussion is not possible, the PCT or LHB should raise these concerns in their final response. However, it remains the operator's job to provide evidence that estimates of risk within the application are realistic. PCTs and LHBs should not offer a view of the potential health impacts of a pollutant if they are unsure of accuracy of the assessment.

Environmental Management

- 3.3.19 Poor management practices can present a risk to local communities as they can result in poor environmental performance. The risk assessment provided within the application is only valid provided it is supported by a clearly defined and transparent environmental management systems (EMS). A good EMS can result in cleaner emissions, regulatory compliance and reduce the severity of spills, leaks, and other accidents. The PCT or LHB should expect to see evidence of such systems and should expect the Regulator to confirm that existing EMS represent BAT.

Response

- 3.3.20 Based on the applicant's risk assessment and EMS, the PCT or LHB should offer an opinion as to the short and long-term effects of emissions (both routine and abnormal) and other activities on the local community, especially any particularly vulnerable people. The PCT and LHB should attempt to place any such risks into a local context. This may include using relevant health based standards to characterise the risk in terms of the likely effect and, if necessary, comparing the risks from an installation with other everyday risks which affect morbidity and mortality. If an application contains insufficient data to allow the PCT or LHB to provide such a response, further data should be requested.
- 3.3.21 In order to offer such an opinion, the PCT or LHB should attempt to answer a number of questions:
- What are the emissions during normal operations and do they pose a risk to public health?
 - How significant will the impact of emissions be when combined with other sources of pollution, both existing and proposed?
 - Are there sources of fugitive emissions, which could impact significantly on local populations?
 - How significant are emissions from abnormal operations?
 - Are any of the emissions of known or potential carcinogens or of other substances presenting particular hazard to health?
 - Does the application identify all possible exposure routes and provide data to quantify levels of exposure to human receptors?
 - Are current EMS sufficient to reduce the risk from accidents such as spillages and fires?
- 3.3.22 As discussed in Volume 1, installations regulated by the Environment Agency (A(1)) have a greater potential to pollute the environment than installations regulated by a Local Authority. This will be reflected in the type of response required from a statutory consultee. However, every application should be considered on a case by case basis since the risk posed will depend on the type of industry, substances emitted and local issues such as location, topography etc.
- 3.3.23 Ultimately the consultee has the right to interpret the results of the application as they see fit. It should not be assumed that the Regulator would necessarily pick up on health issues relating to the operator's assessment.

3.4 Local health issues

3.4.1 It is important that PCTs and LHBs inform the Regulator of any local health issue they consider relevant to the application. It may be possible to infer from the application the type of chemicals emitted or used and what type of health issues may require consideration e.g. emissions of irritant chemicals may warrant consideration of respiratory complaints.

3.4.2 Detailed examination of health data in relation to a specific site should only be considered where there is:

1. **Local intelligence** on known or suspected excesses of disease in the local area, e.g. results available through routine surveillance work, complaints from local people or other sources such as known epidemiological evidence.
2. **Biological plausibility** between the disease and the process emissions.
3. An **exceedence** of a relevant environmental standard or objective. Where environmental standards are unavailable, this may include exceedence of occupational standards or consideration of toxicological data.

3.4.3 If any of these criteria are lacking, it is likely that more detailed consideration of local health issues is not warranted.

3.4.4 Where necessary, consideration should be given to reviewing routinely available health surveillance data and the PCT or LHB should also consider whether there are any particularly sensitive sub populations likely to be exposed to a hazard e.g. people with compromised respiratory health may experience a worsening of their condition. This information may be available from demographic sources or from the PCT's or LHB's routine health surveillance activity.

3.4.5 The type of health data that may be available for examination includes (COMEAP, 2000):

- Local Standard Mortality Ratios (SMRs) for diseases such as cancer and cardiorespiratory disorders.
- Hospital Episode Statistics (HES).
- Congenital malformation data.
- Cancer registration data.
- Surveillance of local health issues (i.e. examination of a specific condition in a specific PCT).

3.4.6 In addition, consideration should be given to relevant published research, e.g. epidemiological studies. However, it is recognised that surveillance of potentially environmentally related diseases is in its infancy and PCTs and LHBs should be working regionally with groups such as Regional Public Health Observatories to develop and refine such systems.

- 3.4.7 In the future, it is anticipated that PCTs and LHBs will conduct or be involved in the routine surveillance of sentinel environmentally related conditions independent of IPPC e.g. certain cancers and congenital anomalies. When such systems are in place, it should be relatively easy to incorporate these data within the IPPC response with all applications being quickly checked against this surveillance. However, it is important that surveillance data are used cautiously.
- 3.4.8 As a broad rule, PCTs and LHBs are not required to conduct site-specific epidemiological studies in relation to IPPC applications and there are powerful reasons not to do so. Examination of small area level data in the context of single sites is problematic. Diseases can and do cluster by chance and PCTs and LHBs should only raise concerns where there is a clear and consistent excess of a condition that cannot be accounted for by any other potential cause such as age, gender, deprivation etc. A short-term excess of a disease or an excess that predates the industry has little or no relevance.
- 3.4.9 This is consistent with the view of the Committee on the Medical Effects of Air Pollutants (COMEAP, 2000), which states that:
- “Single site studies of effects of air pollutants on health are unlikely to have sufficient statistical power to confirm or refute assertions of effects and there is a significant risk that the results of such investigations will be impossible to interpret”*
- 3.4.10 If concerns are generic, i.e. they relate to the industrial sector *per se* and not simply to a specific installation, it may be appropriate to collaborate with others in developing multi-site studies. For example, IPPC may raise some national research questions such as the health of communities around specific types of processes. If this is the case, regional epidemiology facilities such as Public Health Observatories and Cancer Intelligence Units or facilities such as the Small Area Health Statistics Unit (SAHSU) may be able to help or coordinate such studies.
- 3.4.11 Where there are valid concerns, it may be appropriate for the PCT to recommend additional health outcome monitoring, particularly if emissions may breach an environmental standard.
- 3.4.12 Finally, throughout this process, the PCT and LHB should be aware of how to manage public concerns and be able to substantiate all the comments they make.

3.5 Future issues (horizon scanning)

- 3.5.1 PCTs and LHBs should be aware that IPPC is a continuous process and as a result an installation may present future issues in terms of affecting new developments such as housing or a new hospital. They may also be concerned that, in the future, better understanding of the effects of pollutants in the environment may warrant reconsideration of the installation. The PCT or LHB should enter into a dialogue at an early stage with their community and Regulator about an application and appreciate they can discuss local health issues with the Regulator at any time. IPPC is not a one-stop process and permit conditions will be routinely reviewed and updated and the industry should be tightly regulated. If

PCTs or LHBs become aware of information or issues that they consider relevant to a particular process, they can raise these issues with the Regulator regardless of the state of the permit application. Even if the permit has been granted, the Regulator will consider any issue that the PCT or LHB considers relevant.

3.6 Reassurance

- 3.6.1 It is important to recognise that the statutory consultee role is not simply about raising concerns. The absence of any health concerns is also useful information and experience has shown that the Regulator can find such feedback useful, particularly in terms of alleviating public concern. Where it has been shown that the risk to public health is low, the PCT or LHB should consider providing reassurance.
- 3.6.2 The PCT or LHB should consider the provision of information and advice to concerned members of the public a key role when dealing with contentious applications.
- 3.6.3 IPPC applications may attract local, and occasionally, national media attention and local campaigns and pressure groups may be established. It will be the responsibility of the PCT and LHB to take the lead on any health concerns identified by these groups and a clear communications strategy is needed. This should be coordinated with other agencies, such as local authorities, that may also be approached, as it is important to ensure that consistent messages are given. However, it should not be forgotten that local concerns might actually draw attention to health complaints that could be associated with emissions.

3.7 What you should not comment on?

- 3.7.1 In addition to those areas that a PCT or LHB should comment on, it is also important to draw attention to those areas that are not covered under IPPC and should not form part of the formal response to the Regulator. However, given the absolute duty of a PCT or LHB to protect the health of its population, restricting their comments to purely IPPC issues can prove challenging. Therefore, whilst this guide recommends that the response focus only on those areas covered by IPPC, it does draw attention to mechanisms through which these concerns can be raised.

Planning

- 3.7.2 PCTs and LHBs should appreciate that IPPC is a permitting process and, unless there is clear evidence of non-compliance with the fundamentals of IPPC, it is not a system for closing down installations or refusing permits. Concerns relating to suitability of the location or development of an installation will be addressed when an operator applies for planning permission. The planning system should take into account the location of the installation, socio-economic issues, visual impact, traffic considerations and transport requirements. In the case of new installations, the operator is strongly encouraged to apply for planning permission and an IPPC permit simultaneously. This will give PCTs and LHBs an opportunity to raise broader public health issues.

Traffic

- 3.7.3 The effects of an installation on traffic movements, density and emissions in a local community is not covered under the IPPC permitting process, unless the concerns relate to traffic movement on-site. The issue of increased traffic on roads or the effects of off-site traffic on air quality should be addressed through planning. For existing installations, it may be an issue addressed by local authorities under their local air quality management strategy.

Socio-economic issues

- 3.7.4 IPPC does not cover issues about possible social, economic or psychological aspects of the development such as local employment, social capital, or perceived (as opposed to real) nuisance. Psychosocial issues such as the perception of risk, the effect of the installation on house-prices, environmental worry etc cannot be directly addressed by the Regulator through IPPC.
- 3.7.5 Occasionally, an application may draw attention to health inequality issues such as the location of an installation in an area of high socio-economic deprivation where the health impact may be higher or in an area of already high background pollution. However, whilst Regulator will not consider these issues when granting a permit, IPPC can be a mechanism to trigger such discussion and these issues can be addressed through other mechanisms such as health impact assessment and planning.

Generic comments

- 3.7.6 Some industrial sectors may cause concern regardless of the specific installation e.g. incineration and landfills. However, the Regulator will expect any concerns relating to such sectors to be made on a site-specific basis. PCTs and LHBs should not raise generic concerns about a particular type of industry unless they are relevant to a specific situation.

Precautionary principle

- 3.7.7 Absence of evidence is not the same as evidence of absence and it is virtually impossible to define any industrial process (or any activity) as being risk free. It is important that the precautionary principle is not abused in such circumstances. Since IPPC aims to achieve a high level of protection, a PCT or LHB should not object to an installation on the basis of an absence of full scientific certainty that there is not a risk of harm.

BAT

- 3.7.8 Whilst it is very important that PCTs and LHBs reassure themselves that the use of BAT will achieve a high level of protection, they should not enter into a general discussion as to what technology constitutes BAT. However, they may choose to discuss with the Regulator the individual circumstances that may affect application of BAT at a particular installation or if emissions will still cause potential harm after applying BAT.

3.8 Summary of key points

- It is the responsibility of the applicant to provide sufficient information to allow a PCT or LHB to offer a view on the potential health impact of an installation.
- PCTs and LHBs should expect an application to contain information about the sources of pollution, potential exposure pathways and likely receptors.
- PCTs and LHBs should identify relevant local health issues to the Regulator.
- Where appropriate, PCTs and LHBs should aim to provide reassurance to local communities.
- The PCT or LHB should inform that Regulator of any future issues that may be relevant.
- PCTs and LHBs should be aware of those issues that cannot be dealt with under IPPC such as planning and traffic.

4 Recommended Format of Response

4.1 How to respond?

4.1.1 As discussed earlier, where an application is lacking the information that the PCT or LHB require, they should request additional information. Experience to date and feedback from the Regulator suggests that any response from the PCT (be it a request for further information or a final response) should be in the form of questions and statements that are both logical and concise. However, it is not the purpose of this guidance to prescribe a format for the PCT or LHB and ultimately it is for the consultee to decide on the most appropriate format of their response.

4.1.2 There are two key issues that need to be taken into account before responding to the Regulator.

1. All correspondence will be placed on the public register. As a result, any issue or comment raised by the PCT or LHB can, and probably will, be scrutinised, not only by the Regulator but also by the applicant, other statutory consultees, and members of the public and local pressure groups. Therefore, it is important that any comment, however trivial, can be supported by sound scientific and medical evidence. The PCT or LHB response may well be challenged or may exacerbate local anxiety.
2. The ultimate decision on an application is with the Regulator, not the statutory consultees.

4.1.3 The most effective type of response is considered to be a series of clearly written questions and statements, which reference the appropriate part of the application. These should be relevant, informative and helpful. A series of concise questions or statements can help the Regulator decide which issues, if any, need to be further addressed by the applicant. Under the PPC Regulations, any further information can be requested of the applicant through a Schedule 4 Notice, which takes the form of a series of questions. Therefore, the Regulator expects to receive a similarly formatted response. The Regulator does not expect, or want, to see detailed critiques of an application, or details of relevant epidemiological studies etc. Such a response not only makes the Regulator's job difficult but may also result in relevant public health questions being ignored or misinterpreted. Unless a specific question cannot be asked without referencing a study or piece of literature, such information should not be included in the final response.

4.1.4 Upon receiving a response from a PCT or LHB, the Regulator will probably attempt to put their questions into three categories. It is recommended that the statutory consultee consider arranging response into both their request for further information and their final response into these categories, which are:

1. **Key issues of concern** that a PCT or LHB consider must be addressed before a permit can be granted. These are issues that will require urgent attention before permitting. Typically the Regulator will address these

concerns by asking the operator to provide further information through a Schedule 4 notice or by including a condition in a permit. The Regulator often terms such concerns as “showstoppers” or priority concerns. Examples of such issues include the lack of a risk assessment, concerns about pollution levels or the capacity to cause pollution, or possible local health issues such as unexplained levels of respiratory disease.

2. Issues, which require **further information** but are not of sufficient priority to stall the permitting process. These issues could be addressed in improvement conditions in the permit. Examples of such concerns include the need for further monitoring to better validate predicted emissions. It is also possible that issues, which initially were considered key issues of concern when requesting further information, may become something that can be addressed through a permit condition after the provision of further information by the applicant.
 3. **General informative issues** about a particular process, its location, or possible areas of future work. Examples may include errors in the application such as incorrect use of background air quality data or environmental standards, or suggestions for further monitoring. This is also the category in which to identify any positive aspects about the application, e.g. the PCT or LHB is not aware of any local health issues.
- 4.1.5 It is recommended that PCTs and LHBs develop a suitable format of response based on this “traffic light approach” where **RED** relates to urgent issues (category 1), **AMBER** relates to issues that can be addressed through permit conditions (category 2) and **GREEN** being those issues that should not affect the permitting process (category 3). It is also recommended that the final response include a short concluding statement summarising the overall view on the application.
- 4.1.6 PCTs and LHBs should appreciate that their role does not stop once they have responded to the application. In many cases the final response by the consultee may only occur after consideration of further information from the applicant. Similarly, where issues are dealt with through permit conditions, the Regulator may further seek the view of the consultee on such conditions and once a permit has been granted further information and data may be sent forwarded for comment. Responding to IPPC applications can often be a lengthy and long-lasting process.

4.2 Ownership

- 4.2.1 In most cases, PCTs and LHBs will receive support from a range of outside consultants. However, they should recognise that these consultants are not the statutory consultee. Therefore, whatever comments or issues they may raise, it is important that the PCT or LHB takes ownership of these comments in their final response. **The final response must be corporately branded and signed off by the PCT or LHB.**

4.3 Emotive language

- 4.3.1 The use of emotive language should be avoided at all times since it may generate anxiety within the local community. Any questions or requests for further information should be clear and concise. It must be remembered that it is the Regulator, and not the statutory consultee, that makes the permit decision. As a result, the use of terms such as “object”, “refuse”, “reject” is not recommended, even if there are genuine concerns about the impact of the installation. PCTs and LHBs cannot reject or refuse applications; they can only offer an opinion that will help the Regulator determine the permit outcome. Similarly PCTs and LHBs should avoid citing diseases, which have no plausible link with emissions, e.g. unproven links with cancers.
- 4.3.2 If there are issues that may be emotive, the PCT or LHB should liaise with the Regulator before making their final response. It is possible that the Regulator may be aware of, and share, the PCT's or LHB's anxiety. They may also have additional environmental data or knowledge that can alleviate a particular concern.

4.4 Risk communication

- 4.4.1 One of the main responsibilities of the statutory consultee is risk communication. Effective communication with a concerned public is a crucial part of managing community concerns. Simply disseminating information is not enough. There is a big difference between making data and information available and making it accessible and understandable. Unless all agencies take public concerns seriously, and are **seen** to be doing so, they will be treated with suspicion or even hostility. Openness and honesty between all agencies is important. Confusion and conflict may exacerbate local anxiety.
- 4.4.2 Undoubtedly there may often be large differences in risk perception between the operator, the Regulator and the local community. Local people's perceptions of the magnitude of risk will be influenced by factors other than data. Some risks trigger disproportionate levels of concern, particularly if the risk is seen as being forced on local people. Simply presenting risk as a numerical value will not address concern unless the actual issue of risk is clearly explained. This is an important role for PCTs and LHBs. Local people may not see population risk probabilities as applying directly to themselves and, more often than not, concerned residents will be looking for 'evidence of no effect' rather than 'no evidence of an effect'.
- 4.4.3 In many cases, it may be appropriate for the PCT or LHB to meet local people and a useful approach is to have single or small group meetings (surgeries) in addition to (or instead of) large public meetings. Small meetings can work well and allow a real sharing of understandings and viewpoints
- 4.4.4 It may be that some issues of concern cannot be addressed under IPPC, which is restricted to direct health effects rather than quality of life issues. It is important that this point is explained, since many legitimate concerns may not be addressed through the consultation process. That said, many concerns could often be easily addressed if brought promptly to the attention of the Regulator and the statutory consultees. For example, local people often perceive a lack of regulation and enforcement, which is seldom the case. A clear explanation of

how these processes are regulated and emissions monitored may help alleviate such concerns.

4.4.5 There are also a number of excellent guides, which can help PCTs and LHBs develop a suitable strategy to deal with such applications:

- Department of Health's communicating about risks to public health: Pointers to Good Practice 1998 www.doh.gov.uk/pointers.htm
- NSCA Public Acceptability of Incineration www.nasca.org.uk/piaintro.htm
- ATSDR www.atsdr.cdc.gov/atsdrhome.html

4.5 Meeting the 28 day deadline

4.5.1 Many PCTs and LHBs may struggle to meet the 28-day deadline, particularly when the application is particularly large, very technical or if the PCT has more than one application. In addition to preparing in advance of an application (see Section 2), there are a number of ways that PCTs and LHBs can make the 28 day deadline more manageable.

- Raise concerns as soon as possible. This may result in further information being requested of the operator and an extension of the consultation and determination period.
- Consider sending your initial response in an electronic format and by email. This could also apply to any advice and expertise you may seek from other sources. However, ensure that any response (electronic or hard copy) is appropriately branded with your corporate identity and properly signed.
- Avoid duplication with Regulator and other consultees. Speak with Regulator before responding since it may be that they have particular experience of relevant health issues, e.g. most local authorities will have expertise in noise assessments.

4.5.2 It is important to appreciate that even if you miss the 28 day deadline, the Regulator should still accept and consider your response if made prior to the permit determination. If you are struggling to meet the deadline, speak with the Regulator who will be sympathetic and will appreciate prior warning. It is better to get your comments in late rather than not at all.

4.5.3 Even if the comments are made after the permit has been granted, IPPC is a continuous process and there will still be scope for the Regulator to consider health related comments during the regulation of the process.

4.6 Dealing with the media

4.6.1 Occasionally applications may generate considerable media interest and it is importantly that media enquiries are properly managed and coordinated. Media relationships should be determined locally but it is anticipated that the Regulator will take the lead with support, if necessary, from the statutory consultee. Media

enquiries should be directed through the Regulator since they, ultimately, manage the permitting process. However, it would be wise for the Regulator and statutory consultee to discuss at an early stage how they will coordinate media enquiries.

4.7 Summary of key points

- The PCT or LHB response to the regulator should be in the form of structured questions or statements with the most urgent issues clearly identified.
- Where consultants or other agencies are used, it is important that the PCT or LHB take ownership of their comments.
- Emotive language should be avoided at all times.
- The PCT or LHB should consider how best to communicate risk and deal with public or media concerns.

5 How will the Regulator deal with your concerns?

5.1 Introduction

- 5.1.1 The Regulator has a duty to consider any comments a statutory consultee may raise. However, the decision to grant a permit is the Regulator's alone. Upon receiving comments, there are a number of ways the Regulator will deal with a PCT or LHBs concerns.

5.2 Addressing public health concerns

- 5.2.1 The Regulator can ask the operator through a Schedule 4 Notice to provide further information to address any concerns that the Regulator or a statutory consultee may have. This request will be in the form of specific questions for the operator to address and if it includes questions on public health issues, the PCT or LHB should expect more information to consider.
- 5.2.2 The Regulator is not limited to the number of questions they can raise or the number of times they may issue Schedule 4 Notices although it is preferable to issue just one Notice. For example, if an operator does not address a question in a Schedule 4 Notice to the satisfaction of the Regulator, the question can be asked again. However, if the Regulator considers the operator to have provided an unsatisfactory answer to a particular question, they may refuse the permit.
- 5.2.3 Consideration of the information provided in responses to Schedule 4 Notices will form part of the determination process.

5.3 Permit Conditions

- 5.3.1 The Regulator may choose to address some or all of their concerns, including concerns from statutory consultees, by attaching a range of conditions to the permit. These may cover aspects of the installation's operation. They may also set out a strict timetable for operational or structural improvements. In terms of public health, these conditions may include requirements for further monitoring, improvements in pollution abatement technologies or environmental management systems

5.4 Refusing permit

- 5.4.1 If the Regulator has concerns about the installation, which cannot be addressed through a permit conditions, they may refuse the applicant a permit to operate. This decision will be based on sound science since the operator may challenge the Regulator's decision at appeal or judicial review. Consequently if a PCT or LHB raise issues that form part of the Regulator's decision to refuse a permit, they must be prepared to support such concerns with sound scientific information.

5.5 Rejecting your views

- 5.5.1 After due consideration the Regulator may disagree with some or all the views of a statutory consultee and may not consider them further. They are not required to formally write to the consultee to explain why certain views or comments were not acted upon. However, the consultee can seek dialogue with the Regulator if they feel their views required action.

5.6 Granting a permit

- 5.6.1 After considering the application and the views of all the consultees, the Regulator will decide whether to issue a permit or to refuse the application. In either case, they will produce a decision document that explains their decision. A copy of the permit issued will be placed on the public register and provided to those who have requested it.

5.7 Permit Reviews

- 5.7.1 All permits will be routinely reviewed to check that the operator is in compliance with the permit conditions, that the permit conditions continue to reflect appropriate standards, that they are still “fit for purpose” and that existing BAT is still appropriate. This is an important point because at some point in the future, changes in BAT may result in a better level of protection such as a further reduction of emissions. Therefore, the Regulator may review permit conditions to see whether they still represent BAT. Whilst the PCT or LHB will not be a statutory consultee during reviews of BAT, their views are likely to be sought.

5.8 Enforcement and Suspension

- 5.8.1 The Regulator is able to serve an enforcement notice if it believes an operator has failed, or will fail, to meet permit conditions. An enforcement notice will specify the issues that make non-compliance likely and specify actions that need to be taken to address this issue and to ensure compliance (DEFRA, 2002).
- 5.8.2 Where the Regulator considers the installation presents an imminent risk of serious pollution, the Regulator must serve a suspension notice, which essentially means that the permit shall cease to have effect until the notice is withdrawn. The notice may be withdrawn on appeal or if the operator takes appropriate action to ensure against serious pollution (DEFRA, 2002). The Regulator can also take action to remove the risks and recover costs.

5.9 Summary of key points

- The decision to grant a permit is the Regulators and not the statutory consultees.
- The applicant can challenge the decision of the Regulator at appeal.
- Installations are regulated to ensure compliance with the permit.
- Permits will be regularly reviewed to ensure that they are still relevant.
- Non-compliance with permit conditions may result in enforcement notices or suspension.

6 Conclusion and Future Issues

6.1 Conclusion

- 6.1.1 This Guide has attempted to highlight the major issues surrounding IPPC and the statutory consultee role for public health. If PCTs and LHBs base their response on the issues outlined in this guidance, they should be able to make a useful contribution to the permitting regime without entailing excessive work. IPPC should not be a major drain on the resources of the consultee. If additional support or advice is needed, then support can, and will, be provided from a range of sources.
- 6.1.2 PCTs and LHBs should appreciate that it is not their job to perform a risk assessment for every application. It is the responsibility of the **applicant** to demonstrate that they achieve a high level of protection for the environment **and** human health. However, PCTs and LHBs can, and should, provide an opinion on the health impacts of an installation in terms of the local community. They will be the only source of health expertise in the permitting process and can raise legitimate concerns about potential or actual effects of industry on human health. IPPC is an opportunity to influence the regulation of industry and, in many cases, to raise issues prior to the permitting of new installations.
- 6.1.3 Since the introduction of IPPC in 2000, both Regulators and consultees have learned many lessons. This Guide has attempted to include these lessons and Volume 2 reflects the latest views of both the Regulator and the consultee. However, this is a dynamic process and consequently the guidance will be reviewed regularly and amended, if necessary, to reflect new ideas of working.
- 6.1.4 It is apparent that a good working relationship between Regulator and consultee is vital to an effective public health input in this process. This robust relationship should also have other benefits in terms of improving mutual understanding and joint working. An important benefit of the statutory consultee role is that it helps PCTs and LHBs fulfil other environmental health responsibilities and to develop a portfolio of skills and experience that can be applied in other situations, e.g. surveillance of environmentally related diseases.
- 6.1.5 It is recognised that most PCTs and LHBs have developed local solutions to IPPC, which involve a variety of outside agencies. This Guide should encourage both consistency and appropriateness of response and so benefit Regulator, consultee and industry. However, this Guide is not prescriptive and ultimately it is for individual PCTs and LHBs to decide how best to respond.
- 6.1.6 Finally it is important that all (the operator, Regulator and statutory consultee) recognise that IPPC is not simply an administrative exercise but an opportunity to demonstrate that industry achieves a high level of protection of the environment and human health. Similarly it is an opportunity for the Regulator to demonstrate the effectiveness of this regime in achieving such a goal.

6.2 Regulator/consultee seminars

- 6.2.1 Both the Environment Agency and local authorities have begun to hold regular feedback seminars with PCTs and LHBs. Experience to date suggests that these seminars offer an opportunity to discuss the permitting of specific industries, to discuss general issues relating to the Regulator/consultee relationship, and to improve the response process. Such seminars are becoming a regular feature within the PPC process and will be arranged on a local, regional and national basis.

6.3 Training

- 6.3.1 At present most PCTs and LHBs receive considerable advice and support from a range of agencies. As well as helping them respond, these support units should be providing training to public health professionals to both improve awareness of IPPC and also to reduce the amount of support required. There is also a clear need for national training for both the consultee and their consultants. This will ensure consistency in response across England and Wales.
- 6.3.2 At present, the HPA is evaluating training needs and it is anticipated that they will take the lead in training issues related to IPPC. However, PCTs and LHBs should also consider approaching the Regulator to discuss common training issues, since they may be able to provide training on both generic and technical issues of IPPC.

6.4 Auditing and performance review

- 6.4.1 The Chemical Hazards and Poisons Division of the HPA has been nominated to lead for the HPA on IPPC. One of their first initiatives will be to introduce an auditing process to ensure the support that PCTs and LHBs receive is of a basic standard and that the response to the Regulator is both consistent and based on sound science. This audit system will be in place in early 2005.

6.5 Specialist committees

- 6.5.1 The HPA will set up a number of expert panels on IPPC. These will help PCTs and LHBs deal with difficult, unique, politically sensitive or controversial applications. They will also act as honest brokers where there are disagreements between the consultee and the Regulator on health issues.

6.6 Internet support

- 6.6.1 Many people experience similar problems when responding to IPPC applications. The HPA plans to develop an electronic bulletin board for IPPC, which will be located on the HPA web page (www.hpa.org.uk). This will be a one-stop shop for

public health and IPPC issues. It will contain links to relevant DEFRA and Environment Agency guidance, identify new issues in IPPC, provide an up to date schedule of applications and offer a facility where people can post questions or solutions to particular IPPC problems. It is anticipated that this web page will be live in early 2005.

Appendices

GLOSSARY

This Glossary has been adapted from DEFRA's Practical Guide to IPPC (DEFRA, 2002).

Activity

An industrial activity, which may form part of an IPPC installation.

Appeal

The opportunity provided for the Operator to dispute certain actions or decisions by the Regulator by appealing to the Secretary of State.

Application

A submission made by an operator (applicant) to the Regulator to seek a permit to operate, to vary the conditions of a permit, transfer a permit or to surrender a permit.

BAT (Best Available Techniques)

The main basis for determining standards under the PPC Regulations, and defined as 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 ELVs designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.

CHaPD

Chemical Hazards and Poisons Division of the HPA.

CHMRC

Chemical Hazard Management and Research Centre. Former RSPU to the West Midlands. Now part of the Chemical Hazards and Poisons Division of the Health Protection Agency.

CIMSU

Chemical Incident Management Support Unit. Former RSPU to the Wales. Now part of the Chemical Hazards and Poisons Division of the Health Protection Agency.

CIRS

Chemical Incident Response Service. Former RSPU to London, South East, South West, East Midlands, Anglia and North West. Now part of the Chemical Hazards and Poisons Division of the Health Protection Agency.

CIS

Chemical Incident Service. Former RSPU to the North-East. Now part of the Chemical Hazards and Poisons Division of the Health Protection Agency.

Determination

The process by which the Regulator decides whether or not to grant the request sought by an operator in an application, for example by issuing a permit with appropriate conditions or by refusing the permit.

DEFRA

Department for Environment, Food and Rural Affairs

Duly Made

A condition that an application must satisfy by being sufficiently complete in a legal sense before Determination is possible.

EAL(s)

Environment Assessment Levels. Are provisional benchmarks for substances not included in EQSs and are derived from World Health Organisation or other guidance on protecting human health or the environment. Found in Appendix D of the Environmental Agency's Horizontal Guidance Note H1.

ELV(s)

Emission Limit Values. The mass, concentration or level of an emission which may not be exceeded over a given period (or under specified conditions).

Emission

In relation to a Part A Installation, the direct or indirect release of substances, vibrations heat or noise from individual or diffuse sources in an installation into the air, water and land; in relation to a Part B installation, the direct release of substances or heat from individual or diffuse sources in an installation into the air.

Enforcement Notice

A notice served by the Regulator that may enforce compliance with the permit conditions or require remediation of any harm following a breach of any condition.

Environment Agency

A non-departmental public body formed under the Environment Act 1995. The Environment Agency is the Regulator for Part A(1) Installations in England and Wales.

EPA 1990

Part 1 of the Environmental Protection Act 1990

EQS(s)

Environmental Quality Standards. As defined by the PPC Regulations, a requirement which must be fulfilled at a given time by a given environment as set out in EC legislation;

or

A domestic requirement or objective which may be relevant in the determination of BAT.

Existing

Existing operation means an installation or mobile plant put into operation before 31 October 1999 or after 31 October 1999 and before October 2000 provided that a relevant authorization was either applied for or granted before 31 October 1999.

H1

Environment Agency's Horizontal Guidance Note IPPC H1: Environmental Assessment and Appraisal of BAT.

HPA

Health Protection Agency.

Installation

The regulated unit under the IPPC regime.

IPC

Integrated Pollution and Control

IPPC

Integrated Pollution Prevention and Control

IPPC Directive

Directive 96/61/EC concerning Integrated Pollution Prevention and Control

LA-IPPC

Local authority IPPC – a general term used to describe the regulatory regime applied to those Part A Installations for which Local Authorities are the regulator.

LAPC

Local Air Pollution Control – a regime introduced under Part 1 of the EPA 1990 alongside IPC, and carried over (with some modifications) to co-exist alongside IPPC as implemented under the PPC Regulations.

LAPPC

Local authority pollution prevention and control – a general term for the new regime which will be applied to Part B installations. It will gradually replace the LAPC scheme (under EPA 1990) by the year 2007.

LARS

Local and Regional Services Division of the HPA.

Local Authority

In relation to Part B activities and installations, local authority means district, borough and unitary councils, including county councils and county borough councils in Wales, the Council of the Isles of Scilly, and port health authorities constituted under section 2 of the Public Health (Control of Diseases) Act 1984. In relation to Part A(2) activities and installations, all of the above with the exception of port health authorities.

Operator

The person who has control of an installation or mobile plant. An installation or mobile plant need not be in operation for there to be an operator. Legal obligations may be imposed on an operator during the pre- and post-operational phases as well.

Permit

A permit granted by the Regulator allowing the operation of an installation subject to certain conditions.

Pollutant

Any substance, vibration, heat or noise released as a result of an emission, which may cause pollution.

PPC Act

The Pollution Prevention and Control Act 1999, under which the PPC Regulations are made.

PPC Regulations

The Pollution Prevention and Control (England and Wales) Regulations 2000. Relatively minor amendments have been made in Amendment Regulations since then. The Landfill Regulations 2002 and the Waste Incineration Regulations 2002 have also made some amendments. See Appendix 1. Further details are available from Defra.

Public Registers

Registers maintained by Regulators containing information on IPPC Installations.

Regulator

The body responsible for applying the PPC regime – the Environment Agency is the regulator for a Part A(1) Installation while the local authority is the Regulator for a Part A(2) or Part B Installation.

Revocation Notice

A notice served by the Regulator under regulation 21 revoking all or part of a Permit.

RSPU

Regional Service Provider Units. Units providing chemical, environmental and toxicological support to public health professionals. Now part of the CHAP Division of the HPA.

Statutory Consultee

A body listed in paragraph 9 of Schedule 4 to the PPC Regulations which the Regulator must consult with in determining an Application for a Permit and in some variations. See Appendix 3

Substance

Includes any chemical element and its compounds and any biological entity or micro-organism with the exception of certain radioactive substances and genetically modified organisms (regulation 2(1)).

Suspension Notice

A notice served by the Regulator, which results in a permit ceasing to authorise the operation of the entire installation, or specified activities, until remedial action has been taken against an imminent risk of serious pollution.

Substantial Change

Change in operation, which, in the opinion of the Regulator, may have significant negative effects on human beings or the environment.

Variation Notice

A notice served by the Regulator varying the conditions or other provisions of the permit.

Appendix 1: References and key literature

Committee on the Medical Effects of Air Pollution . Investigating the Health Impact of Emissions to Air from Local Industry. Department of Health, 2000. (www.doh.gov.uk).

Department of Health. Saving lives: Our Healthier Nation. London: Stationery Office, 1999 (ISBN 0101438621) (www.ohn.gov.uk/).

Department of Health and Department of the Environment. The United Kingdom National Environmental Health Action Plan. London: Stationery Office, 1996. (ISBN 0-10-133232-7).

Department for Environment, Food and Rural Affairs. Integrated Pollution Prevention and Control (IPPC): A Practical Guide. London: DEFRA publications, 2002. (www.defra.gov.uk/environment/ppc/ippcguide/index.htm).

Department for Environment, Food and Rural Affairs. General guidance manual on policy and procedures for A(2) and B Installations. London: DEFRA publications, 2003. (www.defra.gov.uk/environment/ppc/manual/index.htm).

Environment Agency. Horizontal Guidance Note IPPC H1: Environmental Assessment and Appraisal of BAT. London: Stationery Office, 2003 (ISBN 0 11 3101082). (www.environment-agency.gov.uk/business/)

Environment Agency. Horizontal Guidance Note IPPC H3: Horizontal Guidance for Noise (Part 1: Regulation and Permitting). Stationery Office, 2002 (ISBN 0 11 310123 6). (www.environment-agency.gov.uk/business/)

Environment Agency. Horizontal Guidance Note IPPC H3: Horizontal Guidance for Noise (Part 2: Noise Assessment and Control). Stationery Office, 2002 (ISBN 011 310187 2). (www.environment-agency.gov.uk/business/)

Environment Agency. IPPC S0.01 General Technical Guidance Note (version 2). Stationery Office, 2001 (ISBN 0 11 310174 0). (www.environment-agency.gov.uk/business/)

Environmental Protection Act 1990 (c.43) (ISBN 0 10 5443905).

European Union Integrated Pollution Prevention and Control Directive (96/61/EC). European Union 1996. (europa.eu.int/comm/environment/ippc/)

Farthing J, Marshall B, and Kellett P. Pollution Prevention and Control – The New Regime. LexisNexis UK, 2003. ISBN 0 406 95811 4.

Kibble AJ, Saunders PJ. Contaminated land and the link with health. In: Assessment and Reclamation of Contaminated Land. Issue No. 16. Issues in Environmental Science and Technology. Cambridge: The Royal Society of Chemistry, 2001.

National Focus for Chemical Incidents and World Health Organisation Collaborating Centre International Clearing House for Major Chemical Incidents. Framework for Local Health Boards in Wales for Responding to Integrated Pollution Prevention and Control Consultations. Cardiff: UWIC, 2003.

Volume 2: Responding to IPPC applications

The Pollution Prevention and Control (England and Wales) Regulations 2000 SI 1973. (www.legislation.hms.gov.uk).

The Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2001 SI 503. (www.legislation.hms.gov.uk).

The Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2002 SI 275. (www.legislation.hms.gov.uk).

The Pollution Prevention and Control (England and Wales) (Amendment) (No.2) Regulations 2002 SI 1702. (www.legislation.hms.gov.uk).

The Pollution Prevention and Control (England and Wales) (Amendment) Regulations 2003 SI 1699. (www.legislation.hms.gov.uk).

The Pollution Prevention and Control (England and Wales) (Amendment) (No.2) Regulations 2003 SI 3296. (www.legislation.hms.gov.uk).

The Landfill (England and Wales) Regulations 2002 SI 1559. (www.legislation.hms.gov.uk).

The Waste Incineration (England and Wales) Regulations 2002 SI 2980. (www.legislation.hms.gov.uk).

The Environment Act 1995 (c.25) (ISBN 0 10 5425955 8).

The Pollution Prevention and Control Act 1999. (www.legislation.hms.gov.uk).

This Common Inheritance: Britain's Environmental Strategy. London: Stationery Office, 1990. (ISBN 0-10-112002-8).

Appendix 2: Statutory Consultees

As set out in Schedule 4, Part 2 to the Pollution Prevention and Control Regulations 2000 the statutory consultees of Integrated Pollution Prevention and Control installations are:

- the relevant **Local Health Board** or **Primary Care Trust**;
- the **Food Standards Agency**;
- where the installation or mobile plant is in Wales, the **Secretary of State for Wales**;
- where there may be a release into a sewer, the **sewerage undertaker**;
- where the installation or mobile plant may affect a site of special scientific interest or a European site, if the site is in England the **Nature Conservancy Council**, if it is in Wales the **Countryside Council for Wales** and if it is in Scotland **Scottish Natural Heritage**;
- the **harbour authority** where there may be a release into a harbour;
- the **local fisheries committee** whose sea fisheries district covers any relevant territorial or coastal waters into which there may be releases;
- the **Local Authority**, when the **Environment Agency** is the regulator, and vice versa;
- the relevant **planning authority** where the installation or mobile plant involves a specified waste management activity;
- the **Health and Safety Executive**, in the case of an application for an installation on a site in respect of which a nuclear site licence has been granted under the Nuclear Installations Act 1965 or a major accident prevention policy or safety report document is required under the COMAH Regulations;
- such **other persons** as the Secretary of State may direct.

Whilst the public are not statutory consultees, applications are advertised and members of the public may make representations to the Regulator within 28 days of the advertisement.

Appendix 3: Current support arrangements and key contacts

At the time of writing there are a number of different organisations providing support and advice to Primary Care Trusts in England and Local Health Boards in Wales.

Health Protection Agency (HPA)

Chemical Hazards and Poisons Division

Headquarters

Environmental Health and Risk Assessment Unit
Chemical Hazards and Poisons Division
Health Protection Agency
Didcot, Oxon, OX11 0RQ
Tel: 01235 824852

Birmingham

Chemical Hazards and Poisons Division
Health Protection Agency
G08 Public Health Building
University of Birmingham
Vincent Drive
Edgbaston
Birmingham
B21 2TT
Tel: 0121 414 6547

Cardiff

Chemical Hazards and Poisons Division
Health Protection Agency
University of Wales Institute Cardiff (UWIC)
Colchester Avenue
Penylan
Cardiff
CF3 9XR
Tel: 029 2041 6388

London

Chemical Hazards and Poisons Division
Health Protection Agency
Guys and St Thomas' NHS Trust
Avonby Road
London
SE14 5ER
Tel: 0207 771 5323

Newcastle

Integrated Pollution Prevention and Control (IPPC) Team,
Health Protection Agency North East

Milburn House
Dean Street
Newcastle upon Tyne
NE1 1LF

Tel: 0191 261 2577

Local and Regional Services (LARS)

East Midlands

Chemical and Environmental Team
Health Protection Agency East Midlands
29 Bridgford Road
West Bridgford
Nottingham
NG2 6AU
Tel: 0115 981 5692

North East

Integrated Pollution Prevention and Control (IPPC) Team
Health Protection Agency North East
Northumberland Care Trust
Merley Croft
Loansdean
Morpeth
Northumberland
NE61 2DL
Tel: 01670 394 443

National Public Health Service for Wales

18 Cathedral Road,
Cardiff
CF11 9LH
Tel 029807802
<http://www.nphs.wales.nhs.uk>

Academic Departments

Liverpool John Moores University

IPPC Support Unit
Centre for Public Health
Liverpool John Moores University
70 Great Crosshall Street

Liverpool
L3 2AB
Telephone 02920 787802
Fax 02920 787888

University of Newcastle

Yorkshire IPPC Support Unit
School of Population & Health Sciences
University of Newcastle
William Leech Building
The Medical School
Framlington Place
Newcastle upon Tyne, NE2 4HH
Tel: 0191 222 7395

DEFRA

Defra should only be contacted for legal, policy or procedural advice.

General enquiries and consultations

General Defra switchboard/public enquires: 0845 933 55770

Fax Number: 020 7082 8394

A(1) Installations

David Demain Tel: 020 7082 8393
Email: david.demain@defra.gsi.gov.uk

Nigel Barraclough Tel 020 7082 8392
Email: Nigel Barraclough@defra.gsi.gov.uk

A(2) Installations

David Collins Tel: 020 7082 8390
Email: david.p.collins@defra.gsi.gov.uk

Part B Installations

Phillip Pope Tel: 020 7082 8391
Email: phillip.m.pope@defra.gsi.gov.uk

Defra Web Links

Industrial Air Pollution Control: www.defraweb/environment/airquality/lapc/default.htm

Pollution Prevention and Control: www.defra.gov.uk/environment/ppc/index.htm

Air Quality: www.defraweb/environment/airquality/index.htm

Environment Agency

General enquiries and consultations

General Enquiries Line 0845 9 333 111.

Email: enquiries@environment-agency.gov.uk

Process guidance notes, can be found by clicking on Environment-Agency website at:
<http://www.environment-agency.gov.uk/ippc>

Should you have any difficulty then click on "Choose a section" and select "business". Next, scroll down to "Business sectors" and select. Then click on "Cross sector guidance", then "Guidance for process regulated under IPPC".

Regional offices:

Anglian

Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough PE2 5ZR
Tel: 01733 371 811
Fax: 01733 231 840

Midlands

Sapphire East
550 Streetsbrook Road
Solihull B91 1QT
Tel: 0121 711 2324
Fax: 0121 711 5824

North East

Rivers House
21 Park Square South
Leeds LS1 2QG
Tel: 0113 244 0191
Fax: 0113 246 1889

North West

PO Box 12
Richard Fairclough House
Knutsford Road
Warrington WA4 1HG
Tel: 01925 653 999
Fax: 01925 415 961

Volume 2: Responding to IPPC applications

Southern

Guildbourne House
Chatsworth Road
Worthing
West Sussex BN11 1LD
Tel: 01903 832 000
Fax: 01903 821 832

South West

Manley House
Kestrel Way
Exeter EX2 7LQ
Tel: 01392 444 000
Fax: 01392 444 238

Thames

Kings Meadow House
Kings Meadow Road
Reading RG1 8DQ
Tel: 0118 953 5000
Fax: 0118 950 0388

Wales

Cambria House/Tŷ Cambria
29 Newport Road
Cardiff CF24 0TP
Tel: 029 2077 0088
Fax: 029 2079 8555

Appendix 4: Relevant Environmental Standards and Pollutants

EC Environmental Quality Standards Relevant to Integrated Pollution Prevention and Control

Air Quality

- **Directive 80/779** on air quality limit values and guide values for sulphur dioxide and suspended particulates. Values are to be found in the **Air Quality Standards Regulations** (SI 1989/317).
- **Directive 85/203** on air quality standards for nitrogen dioxide. See SI 1989/317.
- **Directive 82/884** on limit value for lead in air. See SI 1989/317.

These three Directives will be replaced by **Directive 99/30** (OJ L163, 29.6.99) setting limit values for sulphur dioxide, oxides of nitrogen, particulate matter and lead in air. This Directive has been adopted as a daughter Directive to the Air Quality Framework **Directive 96/62**. The limit values in the consolidating Directive will be phased in over a period of time starting in 2001. Standards for the following additional substances are also expected to be adopted through further daughter Directives:

- benzene
- carbon monoxide
- ozone
- polycyclic hydrocarbons
- cadmium
- arsenic
- nickel
- mercury

Water Quality

Under **Directive 76/464** on pollution caused by dangerous substances discharged into water the following "daughter" Directives set EQSs for List I substances:

- **Directive 82/176** contains quality objectives for mercury discharged by the chloralkali electrolysis industry
- **Directive 84/156** contains quality objectives for mercury discharged by other industrial sectors
- **Directive 83/513** contains quality objectives for cadmium discharges
- **Directive 84/491** contains quality objectives for hexachlorocyclohexane discharges
- **Directive 86/280** contains quality objectives for DDT, carbon tetrachloride and pentachlorophenol

- **Directive 88/347** contains quality objectives for aldrin, dieldrin, endrin, isodrin, hexachlorobenzene, hexachlorobutadiene and chloroform
- **Directive 90/415** contains quality objectives for 1,2-dichloroethane, trichloroethane, perchloroethane and trichlorobenzene

The EQSs set in these Directives are set out as statutory standards in the Surface Waters (Dangerous Substances) (Classification) Regulations 1989 (SI 1989/2286) and the Surface Waters (Dangerous Substances) (Classification) Regulations 1992 (SI 1992/337) in respect of the following substances:

- aldrin, dieldrin, endrin and isodrin
- cadmium and its compounds
- carbon tetrachloride
- chloroform
- DDT (all isomers)
- para-para-DDT
- hexachlorobenzene
- hexachlorobutadiene
- hexachlorocyclohexane (all isomers)
- mercury and its compounds
- pentachlorophenol and its compounds
- 1,2-Dichloroethane
- trichloroethylene
- perchloroethylene
- trichlorobenzene

Where "candidate" List I substances, and List II substances, are concerned, it is for Member States to set statutory standards under the provisions for List II substances. National statutory EQSs are set under the **Surface Waters (Dangerous Substances) (Classification) Regulations 1997** (SI 2560) and the **Surface Waters (Dangerous Substances) (Classification) Regulations 1998** (SI 389) for the following substances:

- arsenic
- atrazine and simazine
- azinphos-methyl
- dichlorvos
- endosulphan
- fenitrothion
- malathion
- trifluralin
- tributyltin
- triphenyltin and its derivatives
- 4-Chloro-3-methylphenol
- 2-Chlorophenol
- 2,4-Dichlorophenol
- 2,4-D (ester and non-ester)
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- bentazone
- benzene
- biphenyl
- chloronitrotoluenes

- demeton
- dimethoate
- linuron
- mecoprop
- naphthalene
- omethoate
- toluene
- triazaphos
- xylene

In addition non-statutory EQSs, pursuant to the List II requirements of the **Dangerous Substances Directive**, are set in **Circular 7/89** for the following substances:

- lead sulcofuron
- chromium flucofuron
- zinc permethrin
- copper
- nickel
- boron
- iron
- pH
- vanadium
- PCSDs
- Cyfluthrin

Directive 78/659 on the quality of fresh water supporting fish life. This Directive sets quality standards for two categories of water: suitable for salmonids (salmon, trout) and suitable for cyprinids (coarse fish). An annex sets out parameters which are either imperative (I) or guide (G) values for each type of water. Member states must set standards no less stringent than the I values and must endeavour to comply with the G values. The values are to be found in the **Surface Waters (Fishlife) (Classification) Regulations 1997** (SI 1997/1331). The parameters are as follows:

- temperature
- dissolved oxygen
- pH
- suspended solids
- biochemical oxygen demand
- total phosphorus
- nitrates
- phenolic compounds
- petroleum hydrocarbons
- non-ionised ammonia
- total ammonium
- total residual chlorine
- total zinc
- dissolved copper

Directive 76/160 on the quality of bathing water. This Directive lists various parameters with imperative (I) or guide (G) values. The values are to be found in the **Bathing Water (Classification) Regulations 1991** (SI 1991/1597). The parameters are as follows:

- total coliforms

- faecal coliforms
- faecal streptococci
- salmonella
- enteroviruses
- pH
- colour
- mineral oils
- surface active substances reacting with methylene blue
- phenols
- transparency
- dissolved oxygen
- tarry residues and floating materials such as wood, plastic, bottles, rubber
- ammonia
- nitrogen Kjeldahl
- pesticides
- heavy metals eg As, Cd, Cr, Pb, Hg
- cyanide
- nitrate and phosphate

Directive 78/659 on quality for shellfish waters. This Directive lists various parameters with imperative (I) or guide (G) values or both. The values are to be found in the **Surface Waters (Shellfish) (Classification) Regulations 1997** (SI 1997/1332). The parameters are as follows:

- temperature
- colouration (after filtration)
- suspended solids
- salinity
- dissolved oxygen saturation
- petroleum hydrocarbons
- organohalogenated substances
- metals: Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Zn
- faecal coliforms
- substances affecting taste of shellfish
- saxitoxin (produced by dinoflagellates)

Directive 75/440 includes values for 46 parameters indicating the quality of surface water for drinking. Values are listed as imperative (I) or guide (G). Values set by Member States must be no less stringent than (I) values. These values are to be found in the **Surface Waters (Abstraction for Drinking Water) (Classification) Regulations 1996** (SI 1996/3001).

Directive 80/68 on the protection of groundwater contains two lists of dangerous substances similar, but not identical, to those contained in the Dangerous Substances Directive. List I substances must not be allowed to enter groundwater, and List II substances must not be allowed to pollute groundwater.

Directive 2000/60/EC the Water Framework Directive will require water to be managed on the basis of river basins. A river basin management plan will have to be drawn up for each region to ensure that good water quality is maintained. The Directive stipulates the use of both ELVs for point sources and EQSs. New standards adopted under this Directive may well replace those set out in some of the Directives above

Indicative List of Pollutants

Schedule 5 to the Pollution Prevention and Control Regulations - Indicative list of the main polluting substances to be taken into account if they are relevant for fixing Environmental Limit Values.

Air

- Sulphur dioxide and other sulphur compounds
- Oxides of nitrogen and other nitrogen compounds
- Carbon monoxide
- Volatile organic compounds
- Metals and their compounds
- Dust
- Asbestos (suspended particulates, fibres)
- Chlorine and its compounds
- Fluorine and its compounds
- Arsenic and its compounds
- Cyanides
- Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air.
- Polychlorinated dibenzodioxins and polychlorinated dibenzofurans

Water

- Organohalogen compounds and substances, which may form such compounds in the aquatic environment
- Organophosphorus compounds
- Organotin compounds
- Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment
- Persistent hydrocarbons and persistent and bioaccumulable organic Toxicological substances
- Cyanides
- Metals and their compounds
- Arsenic and its compounds
- Biocides and plant health products
- Materials in suspension
- Substances, which contribute to eutrophication (in particular, nitrates and phosphates)
- Substances, which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc)