

**POLLUTION PREVENTION AND CONTROL (PPC)**  
**A GUIDE FOR NHS BOARDS IN SCOTLAND**

Scottish Centre for Infection and Environmental Health



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# **Pollution Prevention and Control**

## **A Guide for NHS Boards in Scotland**

The PPC application procedure will result in NHS Boards being given a range of new and unfamiliar information relating to industrial and commercial activities within their areas. This information provides NHS Boards with an opportunity to improve their awareness of local industrial activities and any potential environmental exposures that may impact on health. The consultation process provides an opportunity to comment on matters of concern associated with the activities described in the applicant's PPC documentation. SEPA will have due regard for any comments made. The comments additionally provide for informed discussion during informal dialogue and permit-review enforcement etc.

The following guide has been compiled to assist NHS Boards in acting as statutory consultees for applications submitted to the Scottish Environment Protection Agency (SEPA), under the Pollution Prevention and Control (Scotland) Regulations 2000, SSI 323 (PPC).

The overall aim of this guide is to assist NHS Boards in responding to a request for comments on a PPC application, by identifying the type of information of particular interest to SEPA.

In addition, the guide should assist in extracting information of interest for Public Health purposes and in formulating a more detailed response to SEPA if desired. Use of the guide and the accompanying checklist should help a NHS Board to:

- form a judgement on the adequacy of the public health related information supplied in a PPC application document
- determine whether there are any potential public health hazards associated with emissions from the activities described in the application

Part 1 of this guide explains what PPC is, Part 2 provides a detailed description of the layout of a completed PPC application for a "Part A installation" (form PPC 1 and its accompanying documentation), and Part 3 provides a checklist of questions to help navigate through an application systematically.

The guide does not provide detailed guidance on individual industries, chemicals or emission standards but provides information on where these may be sourced.

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# Pollution Prevention and Control

## A Guide for NHS Boards

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# 1 Background

## 1.1 What is Pollution Prevention and Control (PPC)?

PPC is a regulatory system, requiring industry to prevent or minimise harmful emissions and environmental impacts resulting from its activities, by adopting what is termed "Best Available Techniques (BAT)". PPC is enforced in Scotland through the PPC (Scotland) Regulations 2000. The Regulations enact European legislation on Integrated Pollution Prevention and Control (Council Directive 96/61 EC). SEPA is the statutory enforcing agency in Scotland.

The legislation requires relevant industrial and commercial undertakings, to apply for a permit to operate on a given site, referred to as an "*installation*". New activities within the relevant categories are required to apply for a permit before they can operate. Existing activities, already authorised under existing legislation, and other new activities not previously regulated, will be required to apply for a permit according to a timetable scheduling processes by sector, from now until 2007. (Appendix A).

Where a substantial change is proposed to an existing activity, the requirements of PPC apply early and the operator is required to make an application for a PPC permit in advance of the aforementioned timetable schedule.

Activities subject to PPC are classified as either *Part A* or *Part B* installations, (as defined in Schedule 1 to the Regulations).

## 1.2 What are Part A and Part B Installations?

*Part A* installations tend to be large-scale activities or those with a greater potential for pollution. Emissions to air, land and water are regulated and consideration is also given to noise, energy, waste minimisation and site condition. Many of these installations have previously been subject to Integrated Pollution Control under Part I of the Environmental Protection Act 1990.

SEPA anticipates ~200-500 applications for *Part A* installations in Scotland by 2007.

*Part B* installations tend to be smaller-scale activities or those with limited pollution potential. Only emissions to air are considered for these installations. Many *Part B* installations have already been subject to Local Authority Air Pollution Control (under Part I of the Environmental Protection Act 1990) and these will automatically transfer to PPC without the operators needing to make a new application. Although SEPA anticipates in excess of 2,200 *Part B* installations transferring to PPC by 2007, NHS Boards are only required to be consulted on new applications.

## 1.3 Why are NHS Boards Involved?

As part of the application process, SEPA are required to seek comments from various consultees, including NHS Boards, Local Authorities, the Food Standards Agency, Water Authorities, Harbour Authorities, Scottish Natural Heritage and the Health & Safety Executive. The aim of seeking input from consultees is to assist SEPA in

making a fully informed determination as to whether or not to grant a permit and the nature of any conditions that may be specified in the permit.

SEPA will therefore send a copy of all relevant PPC applications, associated with activities sited within a NHS Board area, to the relevant NHS Board, marked for the attention of the Director of Public Health. SEPA is required to send this within 14 days of receipt from the original applicant. The NHS Board then has 28 days in which to acknowledge and respond as appropriate with any comments. SEPA is then required to place any response from a NHS Board on its public register.

This is a register of information pertaining to the application that is freely available to anyone who wishes to view it. The Regulations do however provide that where a consultee does not wish their response or part of their response to be made public, that a statement to that effect only is placed on the public register. It is not expected that NHS Boards will require this exclusion, however on occasion some sensitive data may require to be omitted from the public register primarily for reasons of National Security or commercial confidentiality.

There is however no statutory requirement in terms of the nature of the response required from a NHS Board.

#### **1.4 What is expected from NHS Boards?**

SEPA is responsible for deciding whether or not to issue a permit. SEPA will therefore be considering both the human health, as well as environmental impacts of emissions from the installation. This is typically achieved through consideration of established emissions standards and/or environmental quality standards, rather than detailed consideration of toxicology. Given their remit for public health protection, SEPA anticipate that NHS Boards will wish to give consideration to the potential public health hazards associated with the activities described in an application for a permit. NHS Boards may therefore consider responding on the basis of:

1. knowledge regarding the local population and locality
2. local information regarding public health concerns relating to an existing installation
3. contributing to the assessment of the possible health hazards associated with exposure to actual or potential emissions associated with an installation

The Central Legal Office for the NHS in Scotland have been consulted and advised that there is no obligation, in terms of the PPC legislation, for a NHS Board to comment on a PPC application. They do however recommend that an NHS board should consider the following in coming to a decision:

Following from the enquiry into the BSE epidemic and the issues raised regarding information disclosure to the public, there is now an expectation that a public body such as an NHS Board will pass on information in its possession which might be of relevance to the interests of the local population, during a consultation process such as that for PPC permit applications.

The final decision as to the relevance of information provided by a NHS Board in relation to a specific application, lies with SEPA. Also it is for SEPA to decide whether it considers information provided by consultees to be sufficiently well substantiated for them to take account of.

A response from a Board should make it clear that it is “on behalf of (Name) NHS Board” based on “information currently held within the Public Health Department” and also that the response should not be construed as constituting a formal health impact assessment.

The level of effort and detail in a response is ultimately a matter for individual NHS Boards to decide. The following overview reflects the consensus of the opinions of the SEHD, SEPA and SCIEH on this issue:

*The principal areas of public health concern will normally be emissions of potentially hazardous substances to air, water and land and the psychological impacts of the “nuisance” effects of noise and smells. In this connection, it should be noted that other statutory consultees for PPC applications include the HSE, the FSA, the Water Authorities and the Local Authorities.*

*The HSE has general responsibility for the health and safety of people at work and of people who might be harmed by the way that work is done (for example because they live near a factory). Support for this general responsibility, particularly at a local level, comes from other bodies including the NHS Boards and the other statutory consultees mentioned above.*

*The main health concern for contaminated land will normally be the potential for uptake into foods, which is ultimately the responsibility of the FSA.*

*Water Authorities have responsibility for the integrity of public drinking water supplies.*

*Local Authorities have statutory responsibilities in relation to private drinking water supplies and “statutory nuisances” including smells and noise.*

*NHS Boards might reasonably assume that each of these statutory consultees will properly address their own area of responsibility. Therefore, the main concern for the NHS Boards will normally be in support of the responsibilities of both SEPA and the HSE for **emissions to air**.*

*Each PPC application should provide adequate and suitable information to allow proper assessment of the potential consequences of airborne emissions both for the environment and for public health. In terms of environmental protection, adequate and suitable information might be data on the rate of discharge of airborne materials from the site (measured, for example, in milligrams per hour). However, for a proper assessment of the potential health effects, this needs to be converted to an estimate of the resultant airborne concentration (milligrams per cubic metre of air) to which the public might be exposed.*

*For any particular PPC application, airborne concentrations might be derived or inferred from data on emission rates by either (i) dispersion modelling, (ii) comparison of measured emission rates with airborne concentrations measured at*

*or beyond the site boundary or (iii) comparison with wider knowledge of the general relationship between these two measures. In this respect, it is for SEPA to define limits on process emission rates that will ensure adequate compliance with appropriate limits for public exposures. These limits will be in terms of either environmental air quality standards or, in their absence, some fraction of the relevant occupational exposure standard.*

*Therefore, the NHS Board might reasonably assume that SEPA (and possibly also the HSE) will examine each PPC application to satisfy themselves of adequate compliance with appropriate limits for public exposures to airborne pollutants. The NHS Board might also reasonably assume that such compliance will provide adequate protection for the general population.*

*The SEHD, SEPA and SCIEH therefore suggest that NHS Boards concentrate on issues of local concern which they are clearly best-placed to assess, such as susceptible local populations. This should avoid duplication of effort or an inappropriately large allocation of resources to review PPC applications. NHS Boards are however free to comment on any aspect relevant to the potential impact of an installation on the health of a local population.*

*The framework provided in this guidance document is designed to help provide a response along these lines.*

There are unlikely to be public health implications associated with every installation. Where a NHS Board wishes to express concerns on technical matters relating to emissions, it is important that the commentary provided to SEPA is based on sound science. It should also be remembered that any such comments must be defensible in an appeal as SEPA may wish to incorporate conditions within the permit based on the information provided by the consultees. The applicant has the right of appeal against any conditions imposed on them by the Regulator, SEPA. Comments should also be provided in terms which enable action by SEPA when determining the application and setting any conditions to be specified in the permit.

A NHS Board has the option to provide a more detailed response to SEPA based on a more comprehensive review of the application documents. SEPA would be happy to receive comments on a more detailed basis relating to the activities at the installation but do not consider it essential for the NHS Board to review these aspects in depth or to comment on technical or toxicological data. SEPA will review all the technical data and assess whether the standards and predictions used are appropriate for the type of installation involved. They will assess any data derived from air pollution modelling and determine if it is valid. However, where a NHS Board consultee considers that alternative standards or parameters should be applied to emissions, they should provide justification for this view.

## **1.5 Emissions Associated with Installations**

It is anticipated that the NHS Board will be interested in the emissions produced by an installation and whether these may have a potentially harmful effect on the health of the local community.

Emissions resulting from an installation may occur in a variety of forms and be released to the environment via the air (including as odours), via water or by deposition on land. Human exposure to such emissions may occur directly or indirectly via these pathways. In terms of the potential exposure of the local population, emissions to air (including odours) are likely to be of most interest to NHS Boards.

Emissions to water may also be of interest, if these could result in contamination of a drinking water supply or affect water used for recreational purposes.

Emissions to land are of potential concern where the land may be used for growing food crops. However, the Food Standards Agency, as one of the statutory consultees, will be expected to comment directly on any implications for food safety associated with an application. Emissions to land may also be of interest in terms of potential for migration of contaminants beyond a site boundary, in the form of gases, volatile vapours or run off. However any information relating to land contaminated from past activities and mentioned in a site report is not strictly relevant to PPC legislation. It will be covered under separate contaminated land legislation and will be considered by the relevant Local Authority.

In addition, there may also be noise emissions that may also be of interest from a public health perspective. As statutory consultees and given their existing expertise in this area Local Authorities are expected to take a particular interest in noise emissions. NHS Boards may wish to liaise with Local Authorities on this and other aspects of the response.

## **1.6 NHS Board Response - Options**

Any response by a NHS Board will become part of the public record on the application and hence will be available for inspection by members of the local community and others. Careful consideration of the response (or non-response) is therefore advisable.

NHS Boards may respond to the application within the 28-day consultation period in a number of ways:

- (a) They may choose not to comment at all, but simply acknowledge receipt of the application.

*The most likely consequence will be that SEPA will assume that there are no public health concerns associated with the installation.*

- (b) The NHS Board may indicate that it has no public health concerns, based on the information provided in the application.

*A categorical statement to this effect might best be reserved for situations where there is a high degree of confidence in the assessment.*

- (c) The NHS Board may indicate that the information provided in the application is *not sufficient* as a basis upon which to provide an informed opinion on potential threats to public health. In such a situation the NHS Board should specify

precisely what additional information it requires in order to provide an informed response.

*The likely consequence is that SEPA will request further information from the applicant prior to a making a decision on whether to grant a permit. This additional information will then be forwarded to the NHS Board.*

- (d) The NHS Board may indicate that the emissions and/or installation processes described are *of concern* as a potential threat to public health. In such a situation the NHS Board should justify their concerns and provide as much information as possible (e.g. information on cause-and-effect of an adverse health impact and possible mitigating actions which could be taken that would not necessarily relate to the technical operation of the activity which SEPA can address).

*The likely consequence is that SEPA will consider specifying conditions within the permit to address these concerns.*

- (e) The NHS Board may indicate, with reference to specified evidence, that it is concerned that the installation, processes or emissions, as described in the application, could pose an *unacceptable hazard* to public health and that the permit should therefore be refused.

*The consequence is likely to be that SEPA will decide whether or not the concerns raised constitute sufficient grounds to refuse an application. If SEPA rejects an application based on the comments received from the NHS Board, the applicant may then appeal against the decision. This might result in an appeal hearing at which the NHS Board may be called to explain and justify its concerns.*

## **1.7 Responding to a Consultation on a PPC Application**

The key elements of a response will be collating the local knowledge relating to the installation supplemented by more detailed comments on the application if the NHS Board wishes to do so.

### **1.7.1 Key Issues on Local Knowledge**

In order to provide a response on the local knowledge aspect, the NHS Board will wish to consider any local information regarding public health concerns relating to the installation. This provides an opportunity to alert SEPA to any relevant local information available regarding an existing site's history in terms of allegations of health effects.

Points (a) to (e) describe these aspects in more detail.

- (a) information from local health agencies regarding the specific installation, including any history of health-related complaints from local residents regarding any emissions, noise or other nuisances associated with the site or any activity carried out at it.

- (b) Genuine allegations of health effects among the local population, attributed to the installation, other than from occupational exposure.
- (c) studies conducted into the health of the local population living near the installation, either carried out as a result of local health concerns, allegations or for any other reason.
- (d) local knowledge of the population living in the vicinity of the installation, particularly in terms of any increased vulnerability or susceptibility to the effects of any environmental emissions, by virtue of pre-existing health or adverse socio-economic conditions.
- (e) recognised health effects associated with installations similar to the one for which a permit is being sought, within the local area, or reported elsewhere or in the medical literature.

### 1.7.2 *Key Questions for a more detailed response*

If a more detailed response is being considered, the essential issue is to decide if there is sufficiently detailed and meaningful information, to enable the NHS Board to provide an informed comment as to the potential public health hazards posed by the installation.

If the information is not considered to be sufficient, the issue is then to decide exactly what additional information is needed by the NHS Board to enable it to give an informed opinion.

If there is sufficient information, the issue is then to decide whether or not the installation poses a potential health hazard to the local population. This is likely to be decided by consideration of the emissions, their potential effects on the local population and any supporting evidence, in order to arrive at a conclusion.

The broad areas of comment that could be covered in this level of response are:

- comments on particular emissions associated with the normal operation of an installation, in terms of the potential to cause adverse health effects among the local population.
- concerns regarding potential adverse public health effects associated with any emissions from abnormal operation of an installation and also from any potential release due to accident or any other reason.

However, to provide this level of response NHS Boards will require clear information on the following essential aspects of the operation of an installation. A more detailed review of this nature is likely to take considerably longer to complete.

- (a) what emissions are produced from the production processes, wastes and by-products, as well as by raw materials in storage, under normal operating conditions?

- (b) what emissions might be released in abnormal situations such as accidental or uncontrolled releases?
- (c) are there any emissions in the form of odours or noise?
- (d) how are emissions released into the local environment e.g. via air, land or water?
- (e) what levels of emissions are known to occur (by monitoring) or are predicted (by modelling) under normal conditions?
- (f) have these levels been compared to environmental quality standards in the document, what are the standards and are these appropriate?
- (g) do the emissions exceed the quoted standards or any other more appropriate standards?
- (h) do the emissions therefore pose a potential public health hazard?

Parts 2 of this guide explains in more detail how to review the application documentation and Part 3 provides a checklist on how to compile an appropriate response.

## 2 Reviewing a PPC Application Form (PPC1) and drafting a response

### 2.1 Introduction

This part of the Guide is intended to be used in conjunction with Part 3, (the Response Checklist). You are advised to read through all of Part 2 first, then go to the checklist in Part 3 and use the guide to help navigate through the checklist.

The first part of the Response Checklist (Section A) refers to the local issues, about which SEPA is particularly interested and gives headings under which a NHS Board response can be organised. If you only plan to provide comments on the application from the local knowledge perspective, you can use Section A of the Response Checklist alone.

However, if you wish to review the application and accompanying documentation in more detail, you may find completing the second section of the checklist, (Section B), helpful in providing a systematic approach. Section B provides headings that follow the layout of the actual PPC1 application form and allows you to record relevant information of interest for each part. It also provides an opportunity to summarise the information and to note any comments and/ or concerns.

At any point during the consultation period, the NHS Board consultee may contact the local SEPA office from where the PPC application was despatched for dialogue concerning the application, particularly regarding any technical aspects where there is uncertainty.

### 2.2 Form PPC1

The standard SEPA form for PPC permit applications is *FORM PPC1* comprising Parts A to F as described below. The form has been designed to reflect the requirements for applications as prescribed by the PPC Regulations.

<b>Form PPC1</b>	<b>Part A</b>	Provides the <i>site location</i> details
	<b>Part B</b>	Specifies information on <i>activities</i> carried out at the installation.
	<b>Part C</b>	Provides information specific to <i>proposed variations</i> to an existing PPC permit for existing installations, detailing the changes and their effects on the environment.
	<b>Part D</b>	Provides information specific to applications for <i>transferring</i> an existing PPC permit, detailing the extent of the transfer and the proposed transferee.
	<b>Part E</b>	Specifies information on applications for <i>surrendering</i> an existing PPC permit, detailing the extent of the surrender and the condition of the site.
	<b>Part F</b>	Details the location of any additional information in support of the application and the location of the non-technical summary, administrative information and applicant declarations.

Most of the applications that will be sent to NHS Boards will refer to applications for new PPC permits. This Guide therefore refers to only Parts A, B and F of Form PPC1. Accompanying the application form should be a detailed supporting document organised in sections that reflect the section headings within Form PPC1. In general, each section in Form PPC1 requests the applicant to provide a reference to the appropriate section in the supporting documentation (e.g. B1.3 references the location of the site report and maps in the supporting documentation). However, it should be noted that not all sections in Form PPC1 require supporting information as they provide succinct information (e.g. all of Part A, B1.1, B1.2).

SEPA will only consider that an application has been “duly made” if they are satisfied that the application form has been completed properly, all elements are present, and that all necessary points have been addressed. SEPA will not pass on an application to a NHS Board unless it is deemed “duly made”.

### **2.3 Using the Guide and the Response Checklist (Part 3 of this Guide)**

The following part of the guide describes which topics to consider as part of a response and how to complete Section A in the Checklist to organise a response. Actions are denoted by ► and © denotes the relevant part of the Checklist to be completed.

Key:    ►    Signifies a *Navigation Instruction* or *action* to assist with reviewing the application.  
         ©    Signifies an item that requires an entry in the *Response Checklist*

**Before completing any part of the Response Checklist you are strongly recommended to read the non-technical summary of the application (part F4 of the Application Form PPC1). This should give a basic overview of the installation to which the application refers and should be a useful starting point. Having read part F4, you may then wish to start completing the Checklist.**

- **Go to Part F4 of Application Form PPC1**
- Check the reference number for the non-technical summary and go to the relevant section in the supporting documentation. **This gives a basic overview of the installation and its activities and is the best starting point for reviewing the application.**

***Having read the non-technical summary, proceed to consider the local issues aspects addressed in Section A of the Response Checklist.***

## **2.4 Summary Review of an Application (Local Knowledge & Health Issues)**

This section reviews how to organise and record details of information based on local knowledge of the installation or the local community.

### **2.4.1 Consultee details**

- ▶ Record details of the consultee & applicant in Section A1 of the Response Checklist. (This is mainly for record purposes.) © Complete Section A1

### **2.4.2 Local Complaints**

- ▶ Consider any available information relating to any local complaints about the installation known to the NHS Board regarding emissions, odours, noise or other nuisances and record these in Section A2 of the Checklist. © Complete Section A2

### **2.4.3 Alleged Health Effects**

- ▶ Consider any available information relating to any alleged health effects attributed to activities at the installation and record these in Section A3 of the Checklist. © Complete Section A3

### **2.4.4 Local Health Studies**

- ▶ Consider information on any local studies of the health status of the people living near an installation prompted by concerns regarding emissions from it or for any other reason and record these in Section A4 of the Checklist. © Complete Section A4

### **2.4.5 Local Population Characteristics**

- ▶ Consider any relevant information on the local population regarding its health status, particularly relating to any concerns about increased vulnerability or susceptibility to environmental emissions due to poor health status or adverse socio-economic circumstances affecting health. Record any such information in Section A5 of the Checklist. © Complete Section A5

### **2.4.6 Information on similar Installations**

- ▶ Consider information on health effects reported in association with similar installations elsewhere, reported in the literature or based on local information on similar sites. © Complete Section A6

## 2.5 In-depth Review of an Application

**Where it is intended to review the application documents in detail, this section of the guide should be read and used in conjunction with Section B of the Response Checklist.**

This part of the guide describes key sections in the PPC1 form where all the relevant information of interest to a NHS Board should be contained. During the development of this Guide, SCIEH reviewed the PPC Application Form in terms of the relevance of each section's contents to a NHS Board consultee. Where a section of the PPC Application has been deemed to be of minimal interest (e.g. management techniques) descriptions of these sections have been omitted from this guidance. The NHS Board is only one of a number of consultees, hence issues that do not have the potential to impact human health directly are expected to be addressed by the relevant statutory consultee with expertise in that area.

### 2.5.1 Form PPC1 Part A

#### ► Go to Part A of Application Form PPC1

This describes the type of application being made, if it is a new or existing facility; the name of the installation; the address and map grid reference number giving the location of the site.

© Enter summary details in Section B QA1.1 to QA1.4

### 2.5.2 Form PPC1 Part B

#### ► Go to Part B of Application Form PPC1

This describes the installation, the type of activities, the actual and potential emissions from the activities as well as details of raw materials, products, by-products and waste material. This part should contain all the required technical data and hazard assessments.

#### B1 "About the installation"

**B1.1** Details key information on "*all the current activities and operations*" occurring at the site ; where these are described in detail and who the operator is. This is best used as a means of identifying the activities at the installation as listed in Column 1. "*Activities in the stationary technical unit*" and "*Directly associated activities*" describe the overall type of process (e.g. paper production, cement production, etc) and the specific activities occurring at the installation. (Columns 2 & 3 specify details required by the Regulations but are of minimal significance to the NHS Board consultee.)

#### ► See relevant sections of the supporting document.

© Enter details in Section B QB1.1

**B1.2** Details why the application is being made; i.e. a new installation, existing installation, or already existing installation for which a “substantial change” is proposed. This information is also provided in A1.1. (Additional Application Forms (Part C, D or E) are required for applications to vary, transfer or surrender a permit.)

**B1.3** Provides reference to a site report and maps within the application documentation. The site report will state the current condition of the land, with reference to the substances associated with operation of the installation under PPC. Some applicants may also include historical information about the site. Maps should show ideally where the nearest inhabited areas are as well as schools, recreational areas, rivers and water bodies.

The site report may also include information on the assessment of the impact of emissions (cross-referenced from section B4).

Any concerns regarding the public health impacts associated with the condition of the land are not relevant to the PPC permit application process. These will be considered by the Local Authorities under the Part IIA Contaminated Land Regime. Any concerns should therefore be passed to the Local Authority.

- ▶ Scan the Site Report, paying particular attention to any incidents involving substances that may have posed a potential risk to human health. Look at the maps to identify potentially sensitive sites (e.g. schools etc.) in the area surrounding the installation.

© Enter all the relevant details in Section B QB1.3

## **B2 “Your proposed techniques”**

Describes “techniques” i.e. how the installation is operated and whether these conform to industry standards of good practice - Best Available Techniques (BAT).

**B2.2** Provides information on the raw materials and should identify any that may have an impact on the environment, identifies any safer alternatives and justifies why the alternatives cannot be used.

- ▶ Identify from the list of raw materials any that have been noted as having an environmental impact and which might therefore impact on human health.

© Enter details in Section B QB2.2

**B2.3** Describes the techniques used to prevent emissions including leaks and malfunctions and should list details of emissions, which might occur under such conditions. This is expected to be mainly in terms of “management systems” and may be of less interest, although the consideration of quality assurance may be evident through a recognised accreditation (e.g. ISO 14001).

- ▶ List any items of concern regarding the description of “techniques” being used to prevent and control emissions. © Enter details in Section B QB2.3 a)
- ▶ List any potential emissions described, including potential releases of chemicals due to accidents, spillages or other uncontrolled release. © Enter details in Section B QB2.3 b)

**B2.4** Refers to discharges to *land* of matter containing List I or List II substances (see Appendix B). This information is likely to be mainly of interest to other statutory consultees (e.g. Local Authorities and Water Authorities). However this information may be worth checking if there is any concern about the potential for public exposure.

An application will only be accepted and a permit issued if the emissions to land will not result in the *entry* of List I substances into groundwater. Similarly, a permit will not be issued if the emissions to land result in the *pollution* of groundwater by List II and other substances. The operator should confirm that this is the case.

- ▶ Identify and note any emissions of List I or List II substances to land. © Enter details in Section B QB2.4

**B2.5** Refers to discharges to *controlled waters* of matter containing List I or List II dangerous substances (see Appendix B). Again, this information is likely to be mainly of interest to other statutory consultees (e.g. Local Authorities and Water Authorities). However this information may be worth checking if there is any concern about the potential for contamination of drinking water or recreational water. There are certain limits imposed on the emissions to controlled waters of List I or List II dangerous substances from the installation. The operator should confirm that these are met.

- ▶ Identify and note any discharges of List I or List II dangerous substances. © Enter details in Section B QB2.5

**B2.9** This section is principally about accidents and their consequences and describes the systems proposed to identify, assess and minimise the accident potential, and outline the measures in place to prevent them. This section should demonstrate adequate awareness of the hazards and risks associated with accidental releases and the consequences for the local population and environment and should identify adequate plans to deal with such a release.

- ▶ Specifically check for sub-sections within B2.9 under headings “Identifying the hazards”, “Assessing the risks” (and also any sub-section detailing an improvement plan, if present) to determine whether the applicant has assessed:
  - i) the nature and scale of the accident hazard presented by the installation and the activities;
  - ii) the risks to areas of population and the environment (receptors);or has justified why an assessment has not been done.

© Enter details in Section B QB2.9

**B2.10** Identifies any “noise sensitive locations” and gives results of noise monitoring. The Local Authority consultee (specified in B6.1) is deemed by SEPA to be the expert in this area and should be contacted for advice, if required.

- ▶ Following any consultation with the appropriate Local Authority note any outstanding concerns regarding noise emissions.

© Enter details in Section B QB2.10

**B2.11** Describes the proposed measures for emissions monitoring under headings including “Emissions Monitoring” and “Emissions Monitoring (Beyond the Installation)”. These are of most relevance to the local population and particular attention should be paid to sub-sections relevant to emissions to air and the assessment of health impacts.

- ▶ Note any concerns within this section regarding the adequacy of the proposed systems and specifically whether the impact on human health has been considered.

© Enter details in Section B QB2.11

**B2.12** Details plans for decommissioning the installation when it ceases operations. (This is expected to be of marginal interest, except when decommissioning provisions may have an impact on human health). Detailed consideration of these issues should be given when the operator intends to cease activity at the installation and to surrender a permit)

- ▶ Consider whether there is sufficient information on the potential impact on human health when the installation ceases operations and note any outstanding concerns regarding the de-commissioning provisions.

© Enter details in Section B QB2.12

### **B3 “Your proposed emissions”**

**This is the key section that should describe emissions from the installation, particularly to air, and should therefore be of major interest to the NHS Board consultee.**

**B3.1** Describes the emissions associated with the activities previously listed (Section B2). This should detail the nature, quantities and sources of foreseeable emissions into each medium (air, water & land) resulting from normal operation (i.e. the techniques described in Section B2). The supplementary documentation should include a table of emissions and a comparison with one or more of the following: Environmental Quality Standards (EQS), Air Quality Objectives, background ambient conditions and / or Benchmarks. The documented emission data should be broken-down by the medium to which it is released and detail any significant fugitive (non-point-source) emissions to all media.

- ▶ Review the documented information on the emissions, paying particular attention to releases to air, in terms of the potential hazards they represent by considering the following issues:

© Enter comments in Section B QB3.1

- is the description of the emissions meaningful?
- are the individual emissions detailed e.g. named individual chemicals rather than generic terms (e.g. “combustion gases”)?
- are environmental standards relevant to the emissions listed?
- are these emissions standards appropriate?
- how do the emissions compare to the standards?
- do you agree with the operator’s assessment?
- are there other standards that would be relevant for comparison?
- how do the emissions compare to these other standards?

## **B4 “Impact on the environment”**

### **B4.1 This is a key section giving details of the impact assessment for the proposed activities.**

Describes the potential significance of the environmental effects of emissions deemed as “foreseeable” (including trans-boundary effects). This should include accidental or uncontrolled emissions (e.g. from raw material stockpiles of gases or other chemicals). This should provide a description (including maps as appropriate) of the environmental targets that act as the receptors of pollution, specifically: air, water & soil, and areas of human population including noise- and odour-sensitive locations. The pathways (routes) by which the receptors will be exposed should be identified. Moreover, an assessment of the potential impact of the total emissions from the activities, on these receptors, should be included. Evidence that the applicant has considered the significance of the impact of the emissions should be documented.

- Review the impact assessment of the emissions, paying particular attention to releases to air, by considering the following issues:
- have the potential adverse health effects on the local population from emissions been identified?
  - how has this assessment been made; is it based on monitoring only or monitoring at the local inhabited areas?
  - is the assessment adequate?
  - is the assessment correct in terms of identifying potential health impacts?
  - has adequate attention been given to the potential impact of abnormal emissions from both normal operations and from accidental releases?
  - is the NHS Board satisfied with the operator’s assessment regarding the health impact of the operations and emissions?
  - is the NHS Board concerned that there are potential hazards posed by the operation of this installation, irrespective of the operator’s assessment?

© Enter comments in Section B QB4.1

Outstanding concerns on any of these issues should be noted.

## **B6 “Statutory Consultees”**

**B6.1** Gives the name of the Local Authority consultee (more than one might be involved for a large site). It may be useful in certain circumstances to discuss the application with the relevant Local Authority, particularly if noise emissions are an issue.

**B6.2** Gives the name of the NHS Board consultee (more than one might be involved for a large site, creating scope for collaboration on a response).

- ▶ Note whether the correct NHS Board has been identified and whether more than one NHS Board is involved in the consultation. © Enter details in Section B QB6.2

**B6.7** Indicates whether the installation is likely to release any substances into a harbour managed by a Harbour Authority. Whilst this is likely to fall under the remit of other statutory consultees, the potential for human exposure to such discharges should be considered bearing in mind the use of harbours for recreational purposes.

- ▶ Note any concerns regarding discharges to harbours. © Enter details in Section B QB6.7

**B6.8** Identifies whether the site is one covered by the Nuclear Installations Act or the Control of Major Accident Hazards (COMAH) Regulations 1999.

- ▶ Note any concerns regarding the status of the site. © Enter details in Section B QB6.8

## **B7 “Specified waste management”**

**B7.1** Identifies if the site is to be used for waste management purposes (e.g. landfill). Emissions should be identified, including any to air. © Enter details in Section B QB7.1

### 2.5.3 Form PPC 1 Part F

#### ► Go to Part F of Application Form PPC1

#### **F2 “Commercial confidentiality and National Security”**

**F2.1** Specifies if the applicant wishes to keep any of the information in the application secret. If this is granted, the information would not be forwarded to the consultee.

- Note any concerns regarding any request to keep the information secret.

© Enter details in Section B QF2.1

#### **F4 “Non-technical summary”**

Provides a non-technical summary of the application document. This is an ideal starting point for the NHS Board’s assessment and response.

#### **F5 “Any other information”**

Lists supplementary information relevant to the installation.

© Enter details in Section B QF5.1

### 3 Response Checklist for commenting on a PPC Application

#### 3.1 Introduction

The following checklist is provided to assist consultees in reviewing an application for a PPC permit submitted on Form PPC1 (for a Part A installation) and the supporting documentation. It is also intended to be used to systematically record relevant information as part of the NHS Board response. Records of this nature may be particularly useful considering the possibility of more than one installation operating in the local area.

The aims are to:

- 1) Record local information relating to the installation or the local population (Section A).
- 2) Record information on technical aspects of the application and use this to formulate a more detailed response if required (Section B).  
On the basis of a more detailed review of the information provided in the application documents the NHS Board may wish to consider expressing a view in its response on the following basis:
  - a) all relevant health hazards have been recognised and will be controlled such that the risk of adverse health effects will be minimised  
*or*
  - b) more information is needed in order to make an adequate assessment of the potential risk to public health  
*or*
  - c) the risk of adverse health effects is considered unacceptable on the basis that all the relevant health hazards will not be adequately controlled
- 3) Provide a quick-reference for any future incidents that may involve the installation

The checklist is designed to allow it to be completed and used as part of the response to SEPA and to act as a record for internal NHS Board use. It is suggested that the Checklist could be included in the response with a covering letter summarising the NHS Board's view on the application along the lines previously suggested in part 1.6 of this Guide. Alternatively the checklist may simply be used to record information and to provide material for use in a letter of response to SEPA.

Some of the elements previously mentioned in Part 2 of this guide are not included in this checklist on the basis that they are mainly for information and so no specific comments are required in the response to SEPA.

Part 2 of this guide should be used to navigate through the Response Checklist and to help identify relevant information for inclusion in the response.

Where a choice of responses are offered, or to indicate that no comments are being noted, tick (  ) as appropriate.



**SECTION A3**     *Alleged Health Effects*

Note details of any alleged health effects attributed to activities at the installation [see Guide section 2.4.3].

None

**SECTION A4**     *Local Health Studies*

Note details of any studies of the health status of the local community prompted by concerns regarding the installation or for any other reason [see Guide section 2.4.4].

None

**SECTION A5      *Local Population Characteristics***

Note any information on the local population regarding its health status which may be relevant, particularly relating to any concerns about increased vulnerability to environmental emissions [see Guide section 2.4.5].

None

**SECTION A6      *Information on Similar Installations***

Note any concerns regarding health effects reported in association with similar installations elsewhere [see Guide section 2.4.6].

None

## SECTION B Detailed Review of Application Form PPC1 & Documentation

See Part A in Application Form PPC1 and complete the details below.

<b>QA1.1 Application type</b>
New permit <input type="checkbox"/> Variation of an existing permit <input type="checkbox"/> Transfer of an existing permit <input type="checkbox"/> Surrender of an existing permit <input type="checkbox"/>
<b>QA1.2 Installation name / identifier</b>
<b>QA1.3 Installation address</b>
<b>QA1.4 Type of installation</b>

See Part B in Application Form PPC1 and complete the details below.

<b>QB1.1 List all the relevant activities, which might generate sources of hazards and emissions associated with:</b>
Raw Materials
Production Activities
Waste By-products
Energy Sources and Emissions (e.g. combustion gases)

**QB1.3 Check that there is a site report and maps describing the installation?**

Are there any incidents documented in the Site Report that may have posed a risk to human health?

Yes

No

If Yes, list:

List any inhabited areas and any potentially sensitive locations e.g. schools, recreation areas, hospitals, residential homes, hospices etc. in close proximity to the installation (e.g. within 1 km radius):

None

**QB2.2 List the raw materials that have been noted as having a potential environmental impact which therefore might impact on human health:**

Raw Material:

Impact:

None

**QB2.3 a) Note items of concern regarding the description of “techniques” being used to prevent and control emissions:**

None

**b) List any potential emissions described, including potential releases of chemicals due to accidents, spillages or other uncontrolled release?**

None

**QB2.4 Are there any List I or List II substances documented by the applicant as being likely to be discharged to *land*? (See Appendix B)**

Yes

No

If Yes, note these substances:

**QB2.5 Are there any List I or List II substances documented by the applicant as being likely to be discharged to *controlled waters*? (See Appendix B)**

Yes

No

If Yes, note these substances:

**QB2.9 Has information been provided on:**

Identification of hazards	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Assessment of risks	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Risk reduction techniques	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Improvement plan for accidents and their consequences	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**Has the applicant identified:**

i) the scale and nature of the accident hazard presented by the installation and the activities	Yes <input type="checkbox"/>	No <input type="checkbox"/>
ii) risks to areas of population and the environment (receptors)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

If there is no assessment, has any justification been provided as to why one has not been done.

Yes  No

Comments:

**QB2.10 Note any outstanding concerns identified in consultation with the Local Authority regarding noise emissions:**

None

**QB2.11 Has the potential impact on human health been considered within the emissions monitoring measures proposed?**

Yes  No

Note any concerns regarding the adequacy of the proposed systems:

None

**QB2.12 Is there sufficient information on how any potential hazards will be dealt with when the installation ceases operations to minimise the potential impact on human health?**

Yes

No

Note any concerns regarding the provisions described for de-commissioning:

None

**QB3.1 Note any concerns regarding the documented emissions having considered the following issues:**

- (a) is the description of the emissions meaningful?
- (b) are the individual emissions detailed as individual chemicals rather than generic terms (e.g. "combustion gases")?
- (c) are environmental standards relevant to the emissions listed?
- (d) are these emissions standards appropriate?
- (e) how do the emissions compare to the standards?
- (f) is the operators assessment correct?
- (g) are there other standards which would be relevant for comparison?
- (h) how do the emissions compare to these other standards?

Comments:

None

**QB4.1 Note any concerns regarding the documented impact assessment of the emissions having considered the following issues:**

- (a) have the potential adverse health effects on the local population from emissions been identified?
- (b) how has this assessment been made; is it based on monitoring only or monitoring and air dispersion modelling giving values for exposure at local inhabited areas?
- (c) is the assessment adequate?
- (d) is the assessment correct in terms of identifying potential health impacts?
- (e) has adequate attention been given to the potential impact of abnormal emissions from normal operations and from accidental releases?
- (f) is the NHS Board satisfied with the operator's assessment regarding the health impact of the operations and emissions?
- (g) is the NHS Board concerned that there are potential hazards posed by the operation of this installation, irrespective of the operators assessment?

Comments:

None

**QB6.2 Is the correct NHS Board identified**

Yes  No

**Is more than one NHS Board involved?**

Yes  No

**QB6.7 Note any concerns regarding potential discharges to harbours used for recreational activities**

None

**QB6.8 Is the site covered by the Nuclear Installations Act or by COMAH regulations?**

Yes  No

Note any concerns

None

**QB7.1 Is the site to be used for any waste management purposes?**

Yes  No

(a) If Yes, have the potential health impacts of such use been assessed by the operator?

Yes  No

i) Is the assessment adequate and correct?

Yes  No

ii) Does the assessment suggest any potential health hazard from the NHS Board perspective?

Yes  No

Note any concerns regarding any use of the installation to operate any specified waste management activities:

None

See Part F in Application Form PPC1 and complete the details below.

**QF2.1 Has the operator requested that any information in the application be kept secret?**

Yes  No

Note any concerns regarding any requests for confidentiality on the grounds of commercial confidentiality or National Security:

None

**QF5.1 Is there any supplementary information of relevance to potential health hazards?**

Yes  No

**General assessment**

Does the application provide an adequate indication that the operator is aware of any potential for the installation to generate adverse health impacts among the population living in the vicinity?

Yes  No

Comments:

None

# Appendix A

## PPC Activities and Transition Timetable (in date order)

<b>Part A Activity Sectors</b>	<b>Relevant Section of Schedule 1 of PPC Regulations</b>	<b>Relevant Period for Part A Installation Applications</b> (paragraph reference relates to PPC Regulations, Schedule 1)
<b>2001</b>		
Paper and Pulp Manufacturing Activities	Section 6.1	<b>1st April 2001 to 30th June 2001</b>
Production of Cement and Lime	Section 3.1	<b>1st June to 31st August 2001</b>
Refining Mineral Oil & Gas, Operating Coke Ovens and Coal Gasification & Liquefaction Activities	Section 1.2	<b>Paragraph c: 1st June to 31st August 2001</b> Remaining paragraphs: 1st June to 31st August 2006
Ferrous Metals	Section 2.1	Paragraphs c, e, f, g, h: 1st May to 31st July 2002 <b>Remaining paragraphs: 1st June to 31st August 2001</b>
Tar & Bitumen Processes	Section 6.3	Paragraph (i): 1st January to 31st March 2004 <b>Paragraph (ii): 1st October to 31st December 2001</b>
<b>2002</b>		
Glass & Glass Fibre Manufacture	Section 3.3	<b>1st May to 31st July 2002</b>
Production of Other Mineral Fibres	Section 3.4	<b>1st May to 31st July 2002</b>
Ferrous Metals	Section 2.1	<b>Paragraphs c, e, f, g, h: 1st May to 31st July 2002</b> Remaining paragraphs: 1st June to 31st August 2001
The Treatment of Animal & Vegetable Matter & Food Industries	Section 6.8	<b>Paragraph (a): 1st May to 31st July 2002</b> Paragraphs (b), (c), d(i): 1st June to 31st August 2004 Paragraphs d(ii), (e), (f): 1st January to 31st March 2005
Non-Ferrous Metals	Section 2.2	<b>1st June to 31st August 2002</b>
Coating Activities, Printing and Textile Treatments	Section 6.4	<b>1st October to 31st December 2002</b>
The Manufacture of Dye-stuffs, Printing Ink and Coating Materials	Section 6.5	<b>1st October to 31st December 2002</b>
<b>2003</b>		
Organic Chemicals	Section 4.1	<b>Paragraphs a(i), a(v), a(vi), a(vii), a(xii), (e), (f): 1st January to 31st March 2003</b> <b>Paragraphs a(ii), a(iii), a(iv): 1st June to 31st August 2003</b> Paragraphs a(viii), a(ix), (b), (c), (d): 1st January to 31st March 2006 Paragraphs a(x), a(xi): 1st June to 31st August 2006
<b>2004</b>		
Tar & Bitumen Processes	Section 6.3	<b>Paragraph (i): 1st January to 31st March 2004</b> Paragraph (ii): 1st October to 31st December 2001
The Production of Fuel from Waste	Section 5.5	<b>1st January to 31st March 2004</b>
Carbon Activities	Section 6.2	<b>1st January to 31st March 2004</b>
Ceramics Production	Section 3.6	<b>1st January to 31st March 2004</b>
Disposal of Waste Other than by Incineration or Landfill	Section 5.3	Paragraph (a), (b): 1st June to 31st August 2005 <b>Paragraph c(i): 1st January to 31st March 2004</b> <b>Paragraph c(ii): 1st June to 31st August 2004</b>
Surface Treating Metals & Plastic Materials	Section 2.3	<b>1st May to 31st July 2004</b>
The Treatment of Animal & Vegetable Matter & Food Industries	Section 6.8	Paragraph (a): 1st May to 31st July 2002 <b>Paragraphs (b), (c), d(i): 1st June to 31st August 2004</b> Paragraphs d(ii), (e), (f): 1st January to 31st March 2005
Inorganic Chemicals	Section 4.2	<b>Paragraphs a(i), a(ii), a(iii), a(vi), (b)-(f): 1st October to 31st December 2004</b> Paragraphs a(iv), a(v): 1st June to 31st August 2005

<b>Part A Activity Sectors</b>	<b>Relevant Section of Schedule 1 of PPC Regulations</b>	<b>Relevant Period for Part A Installation Applications</b> (paragraph reference relates to PPC Regulations, Schedule 1)
Manufacturing Activities Involving Carbon Disulphide or Ammonia	Section 4.7	<b>1st October to 31st December 2004</b>
<b>2005</b>		
Recovery Activities	Section 5.4	<b>1st January to 31st March 2005</b>
The Treatment of Animal & Vegetable Matter & Food Industries	Section 6.8	Paragraph (a): 1st May to 31st July 2002 Paragraphs (b), (c), d(i): 1st June to 31st August 2004 <b>Paragraphs d(ii), (e), (f): 1st January to 31st March 2005</b>
Chemical Fertiliser Production	Section 4.3	<b>1st June to 31st August 2005</b>
Incineration	Section 5.1	<b>1st June to 31st August 2005</b>
Disposal of Waste Other than by Incineration or Landfill	Section 5.3	<b>Paragraph (a), (b): 1st June to 31st August 2005</b> Paragraph c(i): 1st January to 31st March 2004 Paragraph c(ii): 1st June to 31st August 2004
Inorganic Chemicals	Section 4.2	Paragraphs a(i), a(ii), a(iii), a(vi): 1st October to 31st December 2004 <b>Paragraphs a(iv), a(v): 1st June to 31st August 2005</b> Paragraphs (b)-(f): 1st October to 31st December 2004
<b>2006</b>		
Organic Chemicals	Section 4.1	Paragraphs a(i), a(v), a(vi), a(vii), a(xii), (e), (f): 1st January to 31st March 2003 Paragraphs a(ii), a(iii), a(iv): 1st June to 31st August 2003 <b>Paragraphs a(viii), a(ix), (b), (c), (d): 1st January to 31st March 2006</b> Paragraphs a(x), a(xi): 1st June to 31st August 2006
Biocide Production	Section 4.4	<b>1st January to 31st March 2006</b>
Pharmaceutical Production	Section 4.5	<b>1st January to 31st March 2006</b>
Explosives Production	Section 4.6	<b>1st January to 31st March 2006</b>
Combustion	Section 1.1	<b>1st January to 31st March 2006</b>
Organic Chemicals	Section 4.1	Paragraphs a(i), a(v), a(vi), a(vii), a(xii), (e), (f): 1st January to 31st March 2003 Paragraphs a(ii), a(iii), a(iv): 1st June to 31st August 2003 Paragraphs a(viii), a(ix), (b), (c), (d): 1st January to 31st March 2006 <b>Paragraphs a(x), a(xi): 1st June to 31st August 2006</b>
Refining Mineral Oil & Gas, Operating Coke Ovens and Coal Gasification & Liquefaction Activities	Section 1.2	Paragraph c: 1st June to 31st August 2001 <b>Remaining paragraphs: 1st June to 31st August 2006</b>
Activities involving Asbestos	Section 3.2	<b>1st June to 31st August 2006</b>
Timber Activities	Section 6.6	<b>1st June to 31st August 2006</b>
Intensive Farming	Section 6.9	<b>1st October to 31st December 2006</b>
<b>2007</b>		
Landfill and Disposal to Land	Section 5.2	<b>1st January to 31st March 2007</b>

# Appendix B

## List I & II Substances

### EC Groundwater Directive (80/68/EEC)

(Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances.)

[http://europa.eu.int/eur-lex/en/lif/dat/1980/en\\_380L0068.html](http://europa.eu.int/eur-lex/en/lif/dat/1980/en_380L0068.html)

### LIST I OF FAMILIES AND GROUPS OF SUBSTANCES

List I contains the individual substances which belong to the families and groups of substances enumerated below, with the exception of those which are considered inappropriate to List I on the basis of a low risk of toxicity, persistence and bioaccumulation. Such substances which with regard to toxicity, persistence and bioaccumulation are appropriate to List II are to be classed in List II.

1. Organohalogen compounds and substances that may form such compounds in the aquatic environment
2. Organophosphorus compounds
3. Organotin compounds
4. Substances which possess carcinogenic, mutagenic or teratogenic properties in or via the aquatic environment<sup>1</sup>
5. Mercury and its compounds
6. Cadmium and its compounds
7. Mineral oils and hydrocarbons
8. Cyanides

### LIST II OF FAMILIES AND GROUPS OF SUBSTANCES

List II contains the individual substances and the categories of substances belonging to the families and groups of substances listed below which could have a harmful effect on groundwater.

1. The following metalloids and metals and their compounds:

Zinc	Selenium	Tin	Vanadium
Copper	Arsenic	Barium	Cobalt
Nickel	Antimony	Beryllium	Thallium
Chromium	Molybdenum	Boron	Tellurium
Lead	Titanium	Uranium	Silver

2. Biocides and their derivatives not appearing in List I.
3. Substances which have a deleterious effect on the taste and/or odour of groundwater, and compounds liable to cause the formation of such substances in such water and to render it unfit for human consumption.
4. Toxic or persistent organic compounds of silicon, and substances which may cause the formation of such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.
5. Inorganic compounds of phosphorus and elemental phosphorus.
6. Fluorides.
7. Ammonia and nitrites.

<sup>1</sup> Where certain substances in List II are carcinogenic, mutagenic or teratogenic, they are included in category 4 of this List.

## **EC Dangerous Substances Directive (76/464/EEC)**

(Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community)

[http://europa.eu.int/water/water-dangersub/76\\_464.htm](http://europa.eu.int/water/water-dangersub/76_464.htm)

The Directive covered discharges to *inland surface waters, territorial waters, inland coastal waters and ground water*. In 1980 the protection of groundwater was taken out of 76/464/EEC regulated under the separate Council Directive 80/68/EEC *on the protection of groundwater against pollution caused by certain dangerous substances*.

The Directive introduced the concept of List I and List II substances, which were listed in the Annex to the Directive, and which are discussed below.

The purpose of the Directive is to eliminate pollution from List I substances and to reduce pollution from List II substances.

### **LIST I OF FAMILIES AND GROUPS OF SUBSTANCES**

List I contains certain individual substances which belong to the following families and group of substances, selected mainly on the basis of their toxicity, persistence and bioaccumulation, with the exception of those which are biologically harmless or which are rapidly converted into substances which are biologically harmless:

1. organohalogen compounds and substances which may form such compounds in the aquatic environment,
2. organophosphorus compounds,
3. organotin compounds,
4. substances in respect of which it has been proved that they possess carcinogenic in or via the aquatic environment
5. mercury and its compounds,
6. cadmium and its compounds,
7. persistent mineral oils and hydrocarbons of petroleum origin, *and*
8. *(for the purpose of implementing Articles 2, 8, 9 and 14 of this Directive)* persistent synthetic substances which may float, remain in suspension or sink and which interfere with any use of the water.

### **LIST II CONTAINS:**

- **substances belonging to the families and groups of substances in List I** for which the limit values referred to in Article 6 of the Directive **have not been determined** (*N.B. only 18 substances have been regulated under the specific Directives. Consequently, all the groups of substances under List I and the other substances on the "candidate-List I" are part of List II*);
- **certain individual substances** and categories of substances belonging to the families and group of substances listed below, which have a deleterious effect on the aquatic environment, which can, however, be confined to a given area and which depend on the characteristics and location of the water into which they are discharged.

## Families and groups of substances referred to in the second indent

1. The following metalloids and metals and their compounds:

1.1 Zinc	1.6 Selenium	1.11 Tin	1.16 Vanadium
1.2 Coppe	1.7 Arsenic	1.12 Barium	1.17 Cobalt
1.3 Nickel	1.8 Antimony	1.13 Beryllium	1.18 Thallium
1.4 Chromium	1.9 Molybdenum	1.14 Boron	1.19 Tellurium
1.5 Lead	1.10 Titanium	1.15 Uranium	1.20 Silver

2. Biocides and their derivatives not appearing on List I. (*N.B. including pesticides*)

3. Substances which have a deleterious effect on the taste and/or smell of the products for human consumption derived from the aquatic environment.

and compounds liable to give rise to such substances in water.

4. Toxic or persistent organic compounds of silicon, and substances which may give rise to such compounds in water, excluding those which are biologically harmless or which are rapidly converted in water into harmless substances.

5. Inorganic compounds of phosphorus and elemental phosphorus.

6. Non persistent mineral oils and hydrocarbons of petroleum origin.

7. Cyanides, fluorides.

8. Substances which have an adverse effect on the oxygen balance, particularly: ammonia, nitrites.

## Appendix C

### *Sources of Information*

#### **Scotland**

##### **PPC Regulations**

<http://www.scotland-legislation.hmso.gov.uk/legislation/scotland/ssi2000/20000323.htm>

##### **Scottish Environment Protection Agency (SEPA)**

<http://www.sepa.org.uk/regulation/chargingschemes/ppcregs/index.htm>

#### **England & Wales**

##### **Department of Health**

<http://www.doh.gov.uk/ipcc/index.htm>

This site contains a link to a document entitled *IPPC - A Practical Guide for Health Authorities*, developed by the Chemical Hazard Management and Research Centre at the University of Birmingham at the request of the Department of Health.

##### **Environment Agency**

<http://www.environment-agency.gov.uk/business/techguide/ipcc/>

##### **Department for Environment, Food & Rural Affairs (DEFRA)**

<http://www.defra.gov.uk/environment/ppc/index.htm>

#### **Europe**

##### **European IPPC Bureau**

<http://eippcb.jrc.es/>

#### **Air Quality Standards & Occupational Exposure Limits**

##### **The Air Quality Strategy for England, Scotland, Wales and Northern Ireland**

<http://www.scotland.gov.uk/library3/environment/airqual.pdf>

##### **EH40/2001 Occupational Exposure Limits 2001**

Health & Safety Executive, ISBN 0-7176-1730-0