

MEMORANDUM OF UNDERSTANDING BETWEEN THE ENVIRONMENT AGENCY AND WATER U.K.

The Roles and Responsibilities of the Environment Agency and Sewerage Undertakers in the Issuing of PPC Permits and the Setting of Trade Effluent Consents in Relation to Discharges to Sewer.

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OBJECTIVE - The objective of this Memorandum of Understanding (MoU) is to minimise pollution in pursuit of a more sustainable environment, and to ensure that the legal obligations placed on both parties are met.

1. INTRODUCTION

- 1.1 The purpose of this Memorandum of Understanding (MoU) is to ensure that effective and efficient co-operation is achieved between the members of Water UK and the Environment Agency in dealing with the dual regulation of discharge of trade effluent to public sewers.
- 1.2 It also aims to assist in combining efforts to minimise pollution of the environment from point source inputs for which Sewerage Undertakers are responsible, particularly with respect to substances discharged of trade effluent origin
- 1.3 Trade effluent discharges can have both environmental effects, in controlled waters, and operational implications in the sewers and at the receiving waste water treatment works (WwTW). The parties to this memorandum acknowledge that they both have specialised knowledge, objectives in common, and an important regulatory role in terms of permitting, compliance monitoring and enforcement action. This MoU seeks to clarify the regulatory roles of both parties.
- 1.4 The procedures appended to this MoU describe the general working arrangements that seek to provide comprehensive control (without gaps or overlap or duplication of effort) and a better understanding of the legislation between regulators.

2. ROLES AND RESPONSIBILITIES

The Environment Agency

- 2.1 The Environment Agency is a Non-Departmental Public Body, sponsored by DEFRA and the Welsh Assembly Government, and has responsibilities for protecting, and improving, the environment as a whole (air, land and water) in England and Wales, and regulates:
 - Discharges to controlled waters (from land based sources) including territorial waters up to three miles seaward of the territorial baseline, this includes discharges from waste water treatment works;
 - Disposal and management of waste;
 - Major industrial processes;
 - Management and disposal of radioactive substances.
- NB – the last three elements also include regulation of some discharges to sewer
- 2.2 The Environment Agency does not have responsibility for all aspects of environmental pollution. In particular, with regard to air pollution, it is only responsible for regulating those major industrial processes which are subject to Integrated Pollution Control under Part 1 of the Environmental Protection Act 1990 and most activities regulated under the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended).
 - 2.3 The Environment Agency has wide ranging powers relating to the control of pollution which it is empowered to exercise 'for the purpose of preventing, minimising, remedying

or mitigating the effects of pollution of the environment' (Section 5 of the Environment Act 1995). These powers relate principally to water pollution, waste regulation and pollution prevention and control. The Environment Agency also has a general duty to contribute towards attaining the objective of achieving sustainable development (Section 4 of the Environment Act 1995).

Water U. K.

2.4 Water U.K. is the representative body of the UK regulated water undertakers. Its members include the ten statutory Sewerage Undertakers located in England and Wales.

2.5 Sewerage Undertakers, are privatised industries, but also conduct public functions and have public duties enforceable by OFWAT, the Secretary of State or the Welsh Assembly Government. These general duties include:

- Providing and maintaining a public sewerage system for surface water and sewage;
- Providing a means of treatment and disposal for the waste entering the sewerage system, via waste water treatment works;
- Allowing the discharge of trade effluent to the sewers, authorised by consent;
- Providing for the disposal of trade effluent, via WwTW;
- Monitoring and enforcing compliance with the provision of the Water Industry Act 1991 (WIA'91), particularly in respect of Sections 111, 118 and 121.

2.6 The Urban Waste Water Treatment Regulations impose a further duty on Sewerage Undertakers to exercise their trade effluent control functions to ensure that the requirements of Schedule 4 to the Regulations are met. Schedule 4 prescribes that trade effluents shall be subject to such pre-treatment as is required in order to:

- Protect the health of staff working in sewers and at WwTWs;
- Ensure that the sewerage system, WwTW and associated equipment are not damaged;
- Ensure that the operation of the WwTW and the treatment of sludge are not impeded;
- Ensure that discharges from WwTWs do not adversely affect the environment, or prevent receiving waters from complying with other Community Directives;
- Ensure that sludge can be disposed of safely in an environmentally acceptable manner.

3. GENERAL WORKING ARRANGEMENTS

Discharges to Sewers

3.1 Sewerage Undertakers regulate discharges to sewer, subject to distinct mechanisms for determinations and appeals. In most cases the Sewerage Undertakers are the sole regulators, except for:

- Installations that come under the Pollution Prevention and Control (PPC) Regulations;
- industrial processes regulated under Part 1 of the Environmental Protection Act 1990 (IPC);
- Special Category Effluent (SCE) as prescribed under the Trade Effluent (Prescribed Processes and Substances) Regulations (SI 1989 No. 1156, as amended);
- Radioactive waste regulated under the Radioactive Substances Act 1993.

Sewerage Undertakers – Trade Effluent Control Function

- 3.2 The power to control trade effluent discharges to sewer is necessary to balance the Sewerage Undertakers' duty to provide sewers, and the right that dischargers have to connect to the sewer. Sewerage Undertakers have direct legal obligations to protect staff and others under health and safety legislation and legal duties to protect and maintain the sewerage and treatment assets vested in them and to ensure that discharges from WwTWs do not adversely affect the environment.
- 3.3 Sewerage Undertakers are subject to criminal liability for breaches of WwTW discharge consents, as enforced by the Environment Agency.
- 3.4 Trade effluent consent setting requires a detailed knowledge and consideration of the operational implications of the trade effluent in the sewerage system, the impact on the treatment process and compliance with the WwTW discharge consent. Monitoring and control of trade effluent discharges are necessary to prevent damage or harm to the sewerage system, the WwTW or the environment and to ensure that the Sewerage Undertaker retains a statutory defence under Section 87(2) of the Water Resources Act 1991.
- 3.5 Trade effluent controls relate solely to the quality and quantity of the effluent discharged. Sewerage Undertakers have no powers to control the process producing the effluent, except in so far as the trade effluent consent limits may influence the choice of process by the discharger.

Integrated Pollution Prevention and Control

- 3.6 The regime of Pollution Prevention and Control (PPC) applies an approach to the regulation of certain industrial activities to achieve a high level of protection of the environment taken as a whole. Techniques are required to prevent, or where that is not practicable, reduce emissions into the air, water and land, to acceptable levels. Limits may be set to ensure that techniques are implemented to achieve the objective.
- 3.7 The Environment Agency regulates Part A(1) installations. Part A(2) installations are usually regulated by the relevant local authority, including permitting, compliance assessment and enforcement. However, the local authority will always be a statutory consultee where the Environment Agency is the regulator, and vice versa. Local authorities have expertise in setting standards in some areas, whilst the Environment Agency will ensure that A(2) permit conditions protect water adequately. The Environment Agency and the local authorities have entered a MoU to guide this work (Working Better Together Protocol Series No.3 "Arrangements to Implement the Requirements of the IPPC Directive").
- 3.8 Discharges of trade effluent to sewer from installations controlled under the PPC Regulations are subject to control by two legal documents:
 - a PPC permit from the Environment Agency (or local authority) allowing a discharge from the installation
 - a trade effluent consent or agreement from the Sewerage Undertaker consenting to the discharge to sewer consistent with the obligations placed on the Sewerage Undertaker, including compliance with its WwTW discharge consent
- 3.9 Industrial sectors currently regulated under Integrated Pollution Control (IPC), and some waste management facilities currently regulated under the Waste Management Licensing regime (Environmental Protection Act 1990) will gradually transfer over to

PPC in a rolling programme extending to 2007. PPC requires control of industrial installations involving substances with the highest potential to damage the environment. Conditions may be placed in permits that require substances, from these installations, to be monitored and controlled. PPC will apply immediately to new and substantially changed installations.

- 3.10 PPC permits regulate the operation of industrial installations and may contain pollutant emission limit values and other conditions based, amongst other things, on the application of Best Available Techniques (BAT). It is a requirement of PPC that emissions whether to controlled waters or to a sewerage system do not cause breaches of statutory Environmental Quality Standards (EQSs) even if this requires levels of treatment more onerous than BAT would imply.

PPC Consultation

- 3.11 As part of the permitting process, the Environment Agency is required to consult with a number of Statutory Consultees, involved because of their specialist knowledge. Where there may be a release into a sewer, the Sewerage Undertaker is a statutory consultee.
- 3.12 The aim of the consultation process is to provide the Environment Agency with facts and views that it might not otherwise have, to assist with its determination. It is the Sewerage Undertaker's opportunity to comment on the appropriateness of co-treatment and any process and effluent controls it may consider justified. The Environment Agency must take into consideration any representations made by consultees in determining the permit.
- 3.13 The Sewerage Undertaker should provide the applicant (operator) with information relating to the sewerage system and receiving WwTW.

Special Category Effluent

- 3.14 A Sewerage Undertaker is required to refer new or varied trade effluent consents that would authorise the discharge of special category effluent (SCE) to the Environment Agency for determination of limits on prescribed substances. The Environment Act 1995 transferred most of the Secretary of State's powers, with respect to the SCE provisions of the WIA'91, to the Environment Agency.
- 3.15 The Sewerage Undertaker then grants a single trade effluent consent including the provisions or conditions determined by the Environment Agency.

The Disposal of Small Amounts of Radioactive Waste to Sewer

- 3.16 The Environment Agency regulates the disposal of radioactive waste into a sewer or drain under the Radioactive Substances Act 1993. Sewerage Undertakers have no powers to control the radioactive content of any discharge. They therefore cannot impose conditions relating to radioactivity in a consent to discharge to sewer, but will regulate the non-radioactive element of the trade discharge in the usual manner.
- 3.17 In granting the authorisation of a discharge to sewer the Environment Agency takes into account the amount and character of the radioactive waste, the proposed route of discharge and the available dilution. This is to ensure that both the public and operational personnel are adequately protected from radiation, even if exposure occurs at the point of discharge to sewer.
- 3.18 The Sewerage Undertaker will provide the Environment Agency with details of the dilution available at the point of entry to sewer, on request.

- 3.19 The Environment Agency will send copies of authorisations for disposal to sewer to the relevant Sewerage Undertaker.

The Sewage Treatment Works and its Discharge Consent

- 3.20 Trade effluent discharges can be difficult and expensive to treat in isolation. Furthermore, pre-treatment may be less cost-effective than co-treatment and may generate increased costs through under-use of vested public assets. The treatment of some types of trade effluent can be undertaken in a more sustainable manner, in terms of the use of energy and chemicals, the production of waste, minimising road transport of waste etc, if they are treated in conjunction with domestic sewage at a WwTW.
- 3.21 Conventional sewage treatment can break down or remove from trade effluents many organic compounds and some other substances. Even substances potentially toxic to the aquatic environment, such as phenols and cyanides, can break down in this way, if they are present in sufficiently low concentrations. The IPPC Directive permits discharge to sewer and co-treatment at a WwTW, providing that such discharge and treatment guarantees an equivalent level of protection of the environment, taken as a whole, as would be achieved if dedicated treatment on-site had been employed. Coupled with appropriate control at source, treatment at a WwTW can be effective. It provides economies of scale, the final discharge is well regulated, treatment is by waste water specialists and it may be the most sustainable option.
- 3.22 Stated generally, the Environment Agency supports the principle that some trade effluents may be better managed by being discharged to sewer and treated at a WwTW than by treatment at the operator's site. However, the decision to do so will depend upon a number of factors including; the amenability of the effluent to biological treatment and the facilities available at the both operator's site and at the WwTW.
- 3.23 If discharges to sewer contain significant amounts of dangerous substances then both parties agree that controlling them at source or treatment to minimise them before discharge to the sewer will normally be the preferred environmental option.
- 3.24 The Sewerage Undertaker will control substances (including dangerous substances where necessary) in order to ensure that, amongst other considerations, the discharge from the WwTW complies fully with its discharge consent.
- 3.25 The Environment Agency may review the discharge consent for a WwTW following the granting of a PPC permit for an installation whose discharge flows to that works. The review may confirm either that the consent continues to be appropriate or that under Environment Agency policy to comply with Government directions a change to the discharge consent conditions is needed in order to comply with Dangerous Substances Directive or other requirements.

Selection of Best Available Technique (BAT)

- 3.26 There are three main options for trade effluent discharges from PPC installations. These are:
- Treatment on site and direct discharge to the environment
 - Discharge to a sewer and treatment at a WwTW
 - Discharge to a sewer after pre-treatment on site and further treatment at a WwTW

Some of these options may not be available at all sites, for instance there may be no suitable watercourse available for a direct discharge.

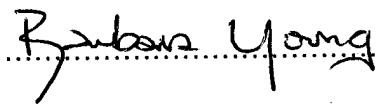
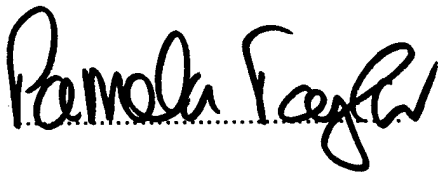
- 3.27 In determining BAT for an installation, the applicant will need to consider the options for treatment of trade effluent, including preventing or reducing its production (for instance, by recycling). In comparing options, the costs and benefits of treatment and environmental impacts would be considered. In doing so, they can take into account the effect of treatment at a WwTW, provided that it can guarantee to deliver as good a level of environmental protection as would be afforded by the other options.

4. JOINT REVIEW ARRANGEMENTS

- 4.1 A Joint Review Committee will meet, whenever need arises, to review the working of the MoU, and reach agreement on any changes to the appended arrangements.
- 4.2 In order to resolve any immediate operational difficulties either party may call special meetings.
- 4.3 The chair will be taken alternately by the two parties to this MoU. Committee membership will comprise at least two officials from each party.
- 4.4 This Agreement is not intended by either party to be legally binding and some or all of the arrangements or procedures referred to herein may be terminated by either party though they will use their best endeavours to give reasonable notice to the other party of such termination.

Signed on behalf of
WATER U. K:

Signed on behalf of the
ENVIRONMENT AGENCY:



Date 13 JUN 05.....

Date 24/5/5.....

A1. POLLUTION PREVENTION AND CONTROL – THE REGULATORY BASIS FOR, AND APPROACH TO CONTROLLING RELEASES TO SEWER FROM PPC-PERMITTED INSTALLATIONS

Regulatory basis

1. Installations regulated under the PPC regime have to be operated so that “all the appropriate preventative measures are taken against pollution, in particular through the application of the best available techniques” (Regulation 11(2)(a)) and “no significant pollution is caused (Regulation 11(2)(b)). Best available techniques (BAT) provide in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions from the installation and the impact on the environment as a whole (Regulation 3). In addition, it is necessary to ensure that waste is avoided and where possible is disposed of “while avoiding or reducing any impact on the environment” (Regulation 11(3)(a)). These represent the key requirements within the PPC Regulations for controlling routine releases from PPC-regulated installations to the environment, including to water.
2. The IPPC Directive sets out at Article 2(6) how indirect releases to water (i.e. releases to sewer) are to be addressed when setting emission limit values from PPC installations. That provision is repeated within Regulation 12(5) of the PPC Regulations, which states:

“The effect of a waste water treatment plant may be taken into account when determining the emission limit values applying in relation to indirect releases into water from a Part A installation or Part A mobile plant provided that an equivalent level of protection of the environment as a whole is guaranteed and taking such treatment into account does not lead to higher levels of pollution.”

BAT and EQS

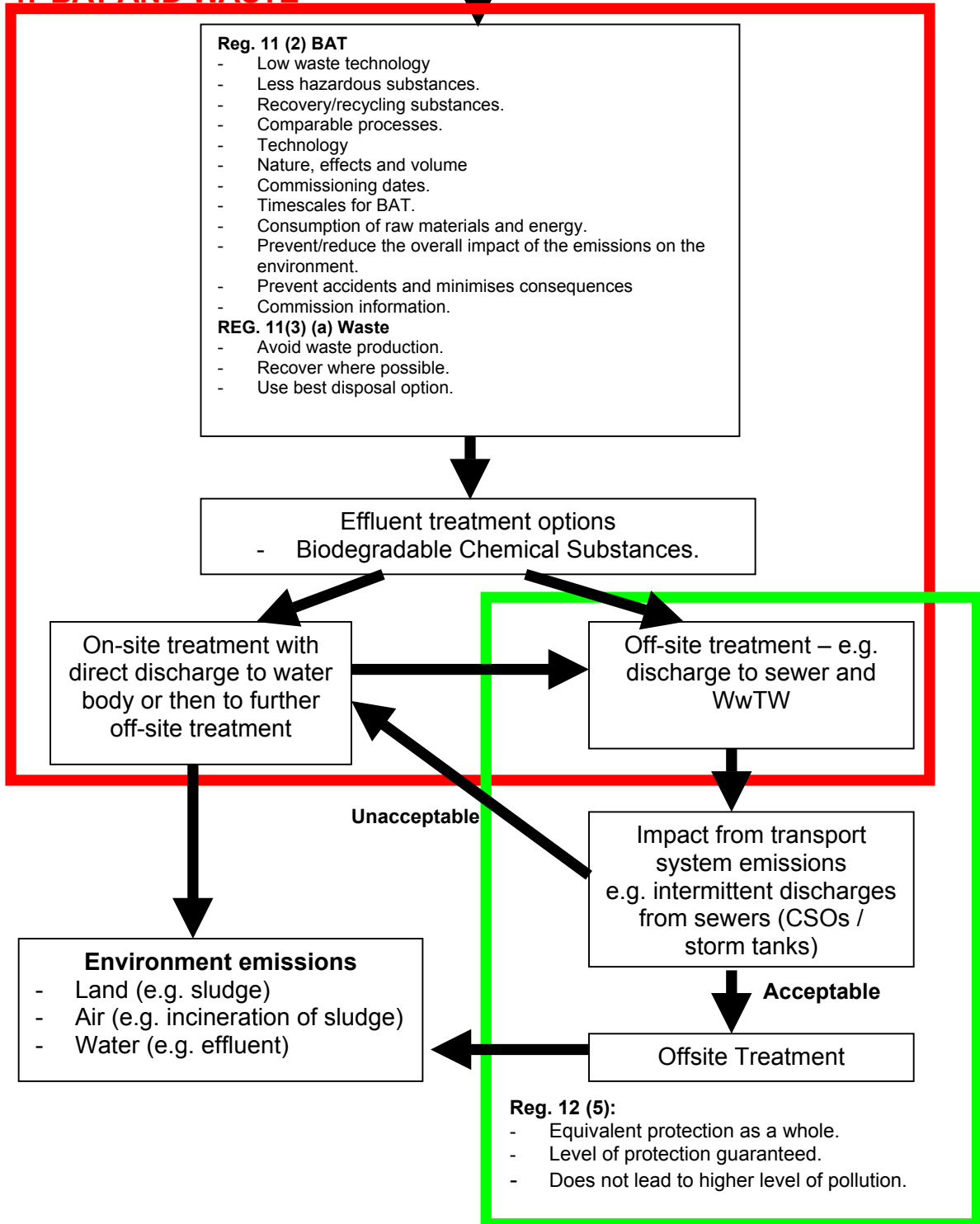
3. The BAT approach complements, but differs fundamentally from, regulatory approaches based on Environmental Quality Standards (EQS). BAT requires measures to be taken to prevent emissions - and measures that simply reduce emissions are acceptable only where prevention is not practicable. Thus, if it is economically and technically viable to reduce emissions further, or prevent them altogether, then this should be done irrespective of whether or not EQSs are already being met. The BAT approach requires that the environment is not considered as a recipient of pollutants and waste, which can be filled up to a given level, but to do all that is practicable to minimise emissions from industrial activities and their impact. The BAT approach first considers what emission prevention can reasonably be achieved and then checks to ensure that the local environmental conditions are secure (see Guidance Note IPPC Environmental Assessments for BAT). The BAT approach is therefore the more precautionary one because the release level achieved may be better than that simply required to meet an EQS.
4. Conversely, if the application of BAT might lead to a situation in which an EQS is still threatened, a more effective technique will be required for that installation. The Regulations allow for expenditure beyond BAT where necessary, and, ultimately, an installation will only be permitted to operate if it does not cause significant pollution.
5. Further advice on the relationship between BAT, EQSs and other related standards and obligations is given in DEFRA’s ‘IPPC: A Practical Guide’.

Approach

6. The approach to be taken, as far as is reasonably practicable, when considering the acceptability of a discharge to sewer from a PPC perspective, and what emission limit values are appropriate, is set out in the flow chart below. It can be summarised as follows:
 - The applicant will establish the volume of trade effluent discharged to sewer
 - The applicant will chemically characterise the composition of the trade effluent, including BOD and COD
 - The Sewerage Undertaker will provide information to the applicant about the integrity of the sewerage system between the PPC installation and the WwTW, and the frequency with which any storm or other overflow occurs.
7. If the frequency of overflow or the risk posed by overflow or leakage is acceptably low, discharge to sewer may be permissible under PPC. In these circumstances:
 - The applicant will establish from the Sewerage Undertaker the degree of treatment that can be consistently provided and the environmental fate and impact of any substances finally released or disposed of.
 - The applicant will establish what can be achieved by treatment of the trade effluent at the site of production, together with the environmental fate and impact of any substances finally released or disposed of. This is dependent on there being an acceptable disposal route for the treated effluent at the site.
 - The applicant will compare the options against the requirements of Regulation 12(5) in order to determine whether the discharge to sewer meets the obligations of the PPC Regulations.
 - Appropriate emission limit values for the discharge to sewer will be set either by the Environment Agency or the Sewerage Undertaker, or both.
8. It is important to note that the comparison between the treatment provided at a WwTW and that provided by on-site treatment must be based on the predicted reduction of mass release of each substance to the environment. A reduction in the concentration of a particular substance that is achieved simply by dilution of a trade effluent from a PPC installation with the high volumetric throughput of a WwTW does not constitute a reduction of mass release, and is therefore not relevant to this comparison. The assessment will also take account of any differences in the locations of the WwTW discharge and the direct discharge. For instance, a direct discharge to a small watercourse may cause a higher level of impact than a discharge to a larger watercourse via a WwTW, even if the mass load discharged via the WwTW were higher. In addition, the assessment may include a review of other matters associated with full or partial on-site treatment, These may include practical issues such as space limitations, noise and odour, water and power usage, sludge movement and the use of chemicals as neutralising agents, coagulants and nutrients.

Overall principles for PPC – prevent and minimise pollution to land / water / air

1. BAT AND WASTE



REG. 12(5) ASSESSMENT

NOTE This diagram is intended to illustrate how the various Regulations inter-relate. It is not intended to suggest any preferred outcome when comparing on site treatment and off site treatment at a WwTW. In undertaking the Reg.12(5) assessment the detailed guidance must be used

A2. PPC - INFORMATION TO BE PROVIDED TO APPLICANTS BY THE SEWERAGE UNDERTAKER

1. The system of Pollution Prevention and Control (PPC) applies an integrated environmental approach to the regulation of certain industrial activities. This means that emissions to air, water (including discharges to sewer) and land, plus a range of other environmental effects, must be considered together. The Environment Agency sets permit conditions to achieve a high level of protection for the environment as a whole. These conditions are based amongst other requirements on the use of the 'Best Available Techniques' (BAT), which balances the costs to the operator against the benefits to the environment. PPC aims to prevent emissions and waste production and where that is not practicable, reduce them to acceptable levels
2. Under the PPC Regulations, Regulation 12(5) provides for the Environment Agency to take into account the effect of a trade effluent treatment works when determining the emission limit values for indirect releases to a controlled water from an installation. This is providing that:
 - An equivalent level of protection of the environment as a whole is guaranteed
 - Taking such treatment into account does not lead to higher levels of pollution
3. This means that where trade effluent, from an installation, is treated off-site at a WwTW, the PPC applicant has amongst other things to demonstrate to the Environment Agency that:
 - The effect of the trade effluent discharged via the WwTW is as good as would be achieved if the emission were treated on-site, based on reduction of amount (not concentration) of each substance to the receiving water. In many cases, this can be answered generically. If the indicative BAT would be settlement followed by aerobic treatment and the WwTW has both these steps (noting that a WwTW will normally have a greater retention time than an on-site plant) it can be concluded that the WwTW is potentially at least as good as a dedicated plant.
 - Action plans have been developed, if appropriate, to prevent direct discharge of the trade effluent in the event of sewage discharge at storm overflows or emergency overflows at intermediate sewage pumping stations. These may include provisions for knowing when overflow is occurring, rescheduling activities such as cleaning or even shutting down when overflow is occurring. A risk-based approach needs to be applied considering necessity and practicality, but ensuring that the level of protection to the environment is maintained.
 - A suitable monitoring programme is in place for emissions to sewer. That specified by the Sewerage Undertaker to protect its treatment plant may suffice, or a more extensive monitoring programme may be required if further controls are thought necessary in order to minimise the amounts of substances released.
4. The Sewerage Undertaker is the body that can most easily provide the information to assist the applicant in making the application. Sewerage Undertakers agree to provide required information to assist the applicant in demonstrating to the Environment Agency that the points set out in 3 above have been adequately addressed. However, the application is the applicant's responsibility and assistance should not result in the Sewerage Undertaker incurring disproportionate costs or providing information that is unnecessary or may be taken out of context.
5. The Sewerage Undertaker should provide information required by the applicant and this may include:

- A copy of the applicant's trade effluent consent or agreement, outlining consent conditions;
 - Details of the Sewerage Undertaker's routine monitoring programme for trade effluent, and analytical results;
 - The name and details of the receiving WwTW, including average flow, type of treatment, consent conditions and receiving watercourse;
 - Information on overflows (storm overflows and emergency overflows) between the applicant's premises and the WwTW and any operational issues associated, i.e. satisfactory or otherwise.
 - The fate and effect of all components of the trade effluent, including dangerous substances that enter the WwTW.
6. The information provided should enable the applicant to demonstrate for the purposes of the PPC application that the trade effluent is properly treated and monitored.

A3. PPC – INFORMATION TO BE PROVIDED TO THE AGENCY BY THE SEWERAGE UNDERTAKER

1. Where a PPC application declares or proposes a discharge of trade effluent to sewer, the Sewerage Undertaker is a statutory consultee.
2. The Environment Agency is looking for the Sewerage Undertaker to comment:
 - That it has no objection to the application and that the discharges to foul sewer specified in the application are contained within the extant consent to discharge trade effluent held by the applicant.
 - That adequate sewers and sewage treatment facilities exist and that no significant pollution is caused by acceptance of the trade effluent. In addition, that all substances present in the trade effluent will be treated within the WwTW such that there is a reduction in substances finally discharged to controlled waters, rather than simple dilution by admixture with domestic sewage.
 - That the sewerage system into which it is proposed that the applicant will discharge trade effluent is in good condition and does not suffer from leakage. Also that it has adequate hydraulic capacity to cope with all foreseeable flow rates of effluent and is considered not to pose any risk of direct discharge of untreated effluent due to overflow.
3. Provision of more detailed comments may be beneficial to both parties. As examples, the Sewerage Undertaker may offer comments on the following matters:
 - Is the consent given or referred to in the application the latest version?
 - Where the Sewerage Undertaker has monitoring data for the discharge to sewer then it will inform the Environment Agency and provide the information, if requested to do so.
 - Are all the sources of effluent described in the application contained within the current consent? If not, does the consent need directing to include omitted effluents or should they be removed from site and not go down the drain to the sewer?
 - Does the effluent comply with consent?
 - Does the Sewerage Undertaker agree with the types and weights of emissions given in the inventory? Is the Sewerage Undertaker aware of other substances or effluents the applicant has not disclosed?
 - Does the Sewerage Undertaker support the applicant's assessment of the environmental impact of any discharge to sewer, with regard to releases to air, water and, in relation to any proposed use of sewage sludge in agriculture, land?
 - Does the Sewerage Undertaker agree with the applicant's risk assessment of fugitive emissions? Is there any history of spillage/accident – especially during filling operations that the competent authority should be made aware of? Are the existing or proposed control measures adequate and acceptable, e.g. bunding, locking-off, drain covers, frequency of emptying interceptors, procedures, monitoring, alarms? Can the Sewerage Undertaker justify specific measures such as containment facilities for chemical spillages, fire-water etc? Should the Sewerage Undertaker ask for better metering and sampling facilities?
 - Where liquid industrial waste is identified as taken to a permitted disposal site that discharges to sewer, is the Sewerage Undertaker monitoring the disposal site's trade effluent for the substances identified?
 - Where the application does not identify or propose a discharge to sewer does the Sewerage Undertaker perceive any conflicting statements in the application in terms of the use of water and its disposal?

- Where an application proposes a discharge to sewer, can the Sewerage Undertaker confirm that discussions have taken place or make the point that any discharge without consent is unlawful? Can the Sewerage Undertaker confirm that a consent will be issued or state that it is investigating sewerage capacity / considering the impact of the discharge?
- Where statements made in the application are unclear, ambiguous or insufficient detail is provided on aspects that concern the Sewerage Undertaker, the Sewerage Undertaker should request clarification or further information.
- Where any aspects, such as raw material, poor practice, sections of the application not completed or marked “confidential” or “not relevant” appear to the Sewerage Undertaker to be unacceptable, it should comment as such.
- Where the site report suggests that the land is contaminated from current or previous use and noxious substances could be entering the drainage system, the Sewerage Undertaker should include these in the consent or press for site remediation. The Sewerage Undertaker should generally support the removal or treatment of contamination infiltration. However, the permit will only address (prevent) future ground contamination after the issue of the permit. Remediation must be pursued under the contaminated land provisions.
- Where the Sewerage Undertaker believes that particular substances should be specifically limited in the PPC permit so that they are reduced at the installation rather than at the WwTW, it should comment as such.
- Confirmation that the amount of water normally supplied to the applicant reflects the figures in the application.
- Are there any other specific issues on which the Sewerage Undertaker believes that the permit should place a clear responsibility on the applicant? In particular, specific comments on persistent and/or prescribed substances would be important.

A4. SPECIAL CATEGORY EFFLUENT – INCORPORATION OF ENVIRONMENT AGENCY NOTICE OF DETERMINATION IN SEWERAGE UNDERTAKER'S CONSENT, DIRECTION OR AGREEMENT

1. Trade effluent consents, directions or agreements relating to discharges of prescribed substances cannot be issued by Sewerage Undertakers until the Environment Agency has served notice under Section 132(3) of the Water Industry Act 1991 (formerly paragraph 3(2) of Schedule 9 to the Water Act 1989).
2. Environment Agency conditions are to be incorporated into the Sewerage Undertaker's consent. Liaison between both parties is required to ensure there is no conflict between the two requirements. However conditions imposed by a Sewerage Undertaker specifically for protection of the workforce or the sewer itself, or to meet other operational requirements, might well be harsher or more restrictive than the Environment Agency might impose for its purposes. Dischargers' attention should be drawn to the fact that Environment Agency conditions are included in the consent. A suggested form of words would be:

"This [consent] [agreement] is subject to a Notice of Determination by the Environment Agency pursuant to Sections 120 and 132 of the Water Industry Act 1991 and the Trade Effluents (Prescribed Processes and Substances) Regulations 1989. The terms and conditions set out in the Notice of Determination dated **** issued by the Environment Agency (a copy of which is annexed hereto) and any subsequent Notices issued are included in the terms and conditions of this Consent."

3. It is also necessary to draw to a discharger's notice to any case where a Sewerage Undertaker uses its powers under Section 124 of the WIA'91 to vary an Environment Agency condition in order to achieve the harsher or more restrictive effect mentioned above. It should also be noted that in order to protect the Sewerage Undertaker's position, consents, directions and agreements which have not been referred to the Environment Agency must include a provision prohibiting the discharge of prescribed substances at higher than background concentration. A suitable condition would be:

"The following matters shall be eliminated from the trade effluent before it is discharged into the sewerage system: -

Except as provided in paragraph xx hereof, the prescribed substances listed in Schedule 1 to the Trade Effluents (Prescribed Processes and Substances) Regulations 1989, as amended, insofar as they are in concentration greater than the background concentration (as defined in the said Regulations);

Where the trade effluent derives from a prescribed process mentioned in Schedule 2 to the said Regulations, and except as provided in paragraph xx hereof, asbestos (as defined in the said Regulations) and chloroform in a concentration greater than the background concentration (as defined in the said Regulations);"

4. For both consents and agreements, it is recommended that provision is included for sewerage undertakers to have access to information held by the discharger in accordance with the conditions of the notice. A suitable condition would be:-

"Records shall be kept by the discharger of the daily recorded volume discharged to sewer, rate of discharge, nature and composition of the trade effluent discharged to the sewer. This is in addition to any records required to be kept by the discharger under the provisions of any Notice of Determination issued by the Environment Agency under Sections 120 and 132 of the Water Industry Act 1991. Such records shall be kept available for inspection at all reasonable times by an authorised officer of the undertaker and copies shall be sent to the undertaker on demand."

Incorporation of Notice of Determination in trade effluent consent by Notice of Direction

5. Section 124(1) to (4) of the Water Industry Act 1991 gives Sewerage Undertakers powers to vary consents to discharge from time to time by serving a Direction on the operator.
6. No Direction can be served within two years of the issue of a trade effluent consent without permission of the owner and occupier of the premises to which it relates. Similarly, once a Direction is served, no further Direction can be served within two years, without permission.
7. Section 125(1) of the WIA'91, allows a Sewerage Undertaker to vary a consent or Direction within the two-year period in order to "provide proper protection for persons likely to be affected by the discharges". However subsection (2) of Section 125 renders the Sewerage Undertaker liable to pay compensation to the discharger unless the Direction is required in consequence of a change of circumstances which has occurred since the beginning of the two year period and which could not reasonably have been foreseen; and otherwise than in consequence of consents given after the beginning of that period.
8. Under certain circumstances, and where necessary, the Secretary of State or National Assembly for Wales can override the two year time limit. Similarly where any of the requirements of Schedule 4 to the UWWT Regulations are compromised, the two-year time limit can be overridden.
9. Where a trade effluent consent already exists, Sewerage Undertakers give effect to Environment Agency Notices of Determination of referrals made under the Trade Effluents (Prescribed Processes and Substances) Regulations 1989, by serving a Notice of Direction which includes the Notice of Determination.
10. The need to refer may be because of the Environment Agency 'calling in' a consent rather than as a result of the Sewerage Undertaker's desire to make a change.

Cases where a new Consent is less than two years old or where it is less than two years since a Notice of Direction was served

11. The Sewerage Undertaker can serve a Notice of Direction within the two year 'hands off' period if it can demonstrate that it is to provide proper protection for persons likely to be affected by the discharge, or the consent of the owner and occupier of the trade premises has been given. If this is not the case then the only method of review is for the Environment Agency to serve a Notice under Section 127 of the WIA'91, thus not infringing the two-year rule. This would also apply to cases where a Direction had been served less than two years previously.
12. Sewerage Undertakers are reluctant to review under Section 125(1) and (2) of the WIA'91 because of the liability to pay compensation.

Cases where the two year limit does not apply

13. If the only reason to serve a Direction is to incorporate an Environment Agency Notice and not to review other conditions of the consent, then to serve a Direction will bring the two-year rule into operation from the date on which such a Direction is served. This will prevent the Sewerage Undertaker from further reviews for two years.
14. Sewerage Undertakers are advised that, when incorporating an Environment Agency Notice by service of a Notice of Direction, all other parameters should be considered at the same time and amendments made as necessary.

A5. SPECIAL CATEGORY EFFLUENT – INFORMATION TO BE PROVIDED TO THE AGENCY BY THE SEWERAGE UNDERTAKER

1. Experience of dealing with references to the Environment Agency for special category effluent has enabled the following information to be identified as the minimum that should accompany a reference, in order to promote its earliest determination. There will be cases where further information is required by the Environment Agency to determine the reference and Sewerage Undertakers should feel free to include such further information as they consider relevant to determination of the particular case. Any more information required by the inspector to enable him to determine the reference will be sought from the Sewerage Undertaker or the discharger as appropriate.
 - Under which Section of WIA'91 is the reference made?
 - Is the Sewerage Undertaker proposing to issue a consent, direction or agreement?
 - What prescribed substances are proposed to be authorised above background and what conditions does the Sewerage Undertaker propose? What is the basis for the proposal?
 - A brief (one line) description of the process giving rise to the special category effluent.
 - Any analytical data for the special category effluent (normally the prescribed substance(s) only, although in certain cases, pH and suspended solids may also be important) plus any volumetric information (if only the total consumption or discharge volume from the site is available, this information is useful).
 - Indication of the “background” concentration of the prescribed substance(s), where the Sewerage Undertaker is also the water supply utility.
 - Site drainage diagram.
 - A history of controls comprising a copy of the most recent consent with all subsequent Directions or a copy of the extant agreement.
 - Full name and registered address of the discharger with contact name, telephone number, site address (and NGR if available), name of local authority.
 - Contact name, address and telephone number at Sewerage Undertaker.
 - Name of the receiving WwTW.
 - Possible points of release to controlled waters, along the sewerage system, from the point of release to the point of treatment.
 - Name of the receiving water
2. In order to comply with Section 120(6) of the WIA'91, the Sewerage Undertaker should send a copy of the referral letter sent to the Environment Agency to the discharger. When the Environment Agency acknowledges receipt of the reference, the Sewerage Undertaker will advise the discharger that the matter is now with the Environment Agency. During the Environment Agency determination period, the Sewerage Undertaker is statutorily prohibited from entering any form of agreement or consent for the discharge until it is in receipt of the Notice of Determination.
3. There is no right of appeal against a Notice but the Environment Agency will always serve a draft Notice on both the discharger and the Sewerage Undertaker and is under a duty to consider representations before serving the final Notice (Section 132(2) WIA'91).
4. The Sewerage Undertaker is subject to a two-month statutory period in which to issue a consent. The timing starts on the date that the trade effluent Notice is signed and is suspended whilst the application is with the Environment Agency (Section 122 WIA'91).
5. Although the period for referral is not restricted by statute, the Environment Agency will aim to issue its Notice within two months of the date of referral.

6. To demonstrate that it has complied with Section 133 of the WIA'91 and secured compliance with the provisions of the Notice, the Sewerage Undertaker will send a copy of the final trade effluent consent served on the discharger back to the Environment Agency within one calendar month of receipt of the Notice of Determination.

A6 SPECIAL CATEGORY EFFLUENT - MONITORING AND ENFORCEMENT OF THE CONDITIONS IMPOSED BY THE AGENCY IN A NOTICE OF DETERMINATION

1. The Notice of Determination under the WIA'91 issued by the Environment Agency will contain the general condition that the process shall be operated and maintained using the best technical means available to reduce the discharge of prescribed substances to a minimum. It will also detail the sampling and monitoring regime for the process producing the prescribed substance. In some instances, the Notice will specify a sampling facility close to the point of origin of the prescribed substance.
2. With regards to the powers of access for the Environment Agency to sample special category effluent, Section 108 of the Environment Act 1995 allows authorised Environment Agency officers entry for sampling and inspection in relation to any pollution control functions, including Chapter III of Part IV of the WIA'91.
3. Section 171 of the WIA'91 gives the Sewerage Undertakers similar powers of entry, sampling and inspection for control of trade effluents to sewer. The water companies also have a duty under Section 133 of the WIA'91 to secure compliance with the provisions of a Notice of Determination.
4. The reference to the Environment Agency is made, primarily, to satisfy the requirement under the Dangerous Substances Directive for prior authorisation by the competent authority for discharges of List 1 substances, including discharges to a sewerage system. Once determined, the conditions are incorporated into the trade effluent consent. The Sewerage Undertaker may include more stringent requirements than those specified in the Notice of Determination.
5. Section 211 of the WIA'91 gives the Sewerage Undertakers powers to prosecute trade effluent dischargers for breach of trade effluent consents. The Environment Agency can also undertake such prosecutions, as a body whose function it is to enforce the Special Category Effluent provisions of the WIA'91. In a breach of a trade effluent consent in respect of a condition specified in a Notice of Determination occurs, dialogue should take place between the sewerage undertaker and the Agency to determine appropriate action in the matter. However, Section 133 of the WIA'91 has given the duty of enforcement specifically to Sewerage Undertakers and the Sewerage Undertakers are the lead regulators for trade effluent discharge to sewers. It is therefore agreed that the Sewerage Undertakers will normally undertake any enforcement for breach of trade effluent consents. The Environment Agency may assist in the preparation of any case, where necessary. In the event that the Sewerage Undertaker declines to take any action against a breach of a trade effluent consent then the Environment Agency may decide to prosecute. In this circumstance, the Sewerage Undertaker will provide all reasonable support in the case.
6. In the case of agreements providing for discharges of prescribed substances not entering the public sewerage system (for example, by private pipe directly to a WwTW) responsibility for enforcement of conditions imposed by the Environment Agency Notice lies with the Sewerage Undertakers and not with the Environment Agency.
7. In addition, it is recommended that Sewerage Undertakers regularly examine data being held by the discharger as required by trade effluent consent. It would also be prudent for local arrangements to be made between the Sewerage Undertaker's operational staff and Environment Agency inspectors to exchange data when it seems that either party's requirements are being compromised.

A7 AGENCY AND SEWERAGE UNDERTAKER CO-REGULATION - CONDITIONS CONTROLLING PRESCRIBED AND OTHER SUBSTANCES

1. The Environment Agency has long had the power (Section 132 (6) WIA'91 and Section 7 (1) (a) and 2 (a) (ii) of the Environmental Protection Act 1990) to write conditions into Notices of Determination and IPC Authorisation which place restrictions on substances and groups of substances other than those substances prescribed under the Trade Effluent (Prescribed Processes and Substances) Regulations 1989 and Environmental Protection (Prescribed Processes and Substances) Regulations 1991, for example sanitary substances.
2. The PPC Regulations may require the Environment Agency to set conditions, based amongst other things on BAT, that may be different to the Sewerage Undertaker's trade effluent consent.
3. The treatment at the WwTW must be equivalent to that achieved if the trade effluent were treated on-site, based on reduction of load (not just concentration) of each substance to the receiving water. In many cases, this can be answered generically. If the indicative BAT would be settlement followed by aerobic treatment and the WwTW has both these steps (noting that a WwTW will normally have a greater retention time than an on-site plant) it can be concluded that the WwTW is potentially at least as good as a dedicated plant.
4. Insistence on pre-treatment in order to reduce readily degradable components further than the requirements of the trade effluent consent may have a consequential effect on, for example, the treatability of the mixed sewage with regards to chemical oxygen demand. This, in turn, would force the Sewerage Undertaker to impose even harsher conditions than those set by the Environment Agency, which may jeopardise the choice of co-treatment as the best option to deliver PPC requirements. This is essentially the balancing of trade effluent treatability and PPC requirements
5. In drafting trade effluent consent conditions, the Sewerage Undertaker will consider the following risks:
 - Blockage, corrosion, flammable and toxic atmospheres in the sewerage system.
 - Hydraulic capacity – increases in flooding and overflow of sewers or at the WwTW.
 - Organic or hydraulic overload of the treatment process.
 - A change in population equivalent affecting UWWTD provisions, for example treatment level or sampling frequency.
 - Physical or chemical interference in the treatment process.
 - Inhibition of the treatment process.
 - Breach of any sanitary condition, including ammonia.
 - Breach of any general or specific listed substance condition.
 - Breach of any WwTW consent operation condition.
 - Breach of any UWWTD condition
 - Breach of any disinfection condition.
 - Breach of dry weather or maximum flow quantity condition.
 - Breach of sludge disposal regulations or threat to the existing or proposed sludge disposal route.
 - Aesthetic impact such as odour, nutrient-rich or coloured or foamed effluents, oil and grease from overflows.
 - Higher base flow increasing the frequency of spills from storm tanks or inlet overflows where limited due to bathing or shellfish water requirements.

6. The Environment Agency will assess the discharge consent for a WwTW following the granting of a PPC permit for an installation whose discharge flows to that works. The review may confirm either that the consent continues to be appropriate or that under Environment Agency policy a change to the discharge consent conditions is needed in order to comply with the Dangerous Substances Directive requirements.
7. Dangerous substances are best controlled at source to the degree that the discharge of such substances from the WwTW will be prevented or reduced and that compliance with EQS in the receiving watercourse is safeguarded. The Environment Agency is the regulator for the PPC permit and will limit the release of substances that may impact on the receiving environment. The Sewerage Undertaker will control other substances including dangerous substances where necessary. This is to ensure, amongst other considerations, that the discharge of trade effluent to the sewer complies with its trade effluent consent and the discharge from the WwTW complies with its discharge consent.
8. The primary objective of dual regulation is to produce an effluent that can be transferred to the Sewerage Undertaker, under the terms of a trade effluent consent, whilst delivering the overall objectives of the PPC regulations. The trade effluent consent will specify the terms and conditions under which the Sewerage Undertaker is prepared to accept responsibility for the effects of the discharge.
9. There may be instances where PPC regulation could require on-site treatment if it is then feasible for the operator to actually re-use part of the effluent within the site, and further the recovery and recycling of substances generated and used in the process, including waste. These are over and above the need to protect the aquatic environment. This would be consistent with the PPC principle of minimising raw material usage.
10. The overall determination is that the Sewerage Undertaker and the Environment Agency should both carry out their respective regulatory duties, with regard to overall environmental improvement, whilst respecting commonality where it exists.

A8 AGENCY AND SEWERAGE UNDERTAKER CO-REGULATION - TIMING ISSUE

1. From the determination date of the PPC permit Section 138(1A) of the WIA'91, as amended, removes the trade effluent from control under SCE provisions of the WIA'91.
2. For a discharge of trade effluent to sewer to be made lawfully, the discharger must hold the consent of the Sewerage Undertaker in addition to any PPC permit needed to operate the process.
3. If a discharger makes application to the Sewerage Undertaker for consent to discharge to sewer under Section 119 of the WIA'91 at the same time as he makes application to the Environment Agency for PPC permit, the provisions of Section 132(2) of the WIA'91 as to representations and objections, etc, must be adhered to. At least in theory, therefore, there could be parallel procedures going on at the same time, moreover, there is nothing in the PPC provisions to hold up the making of a determination under Section 132(3) of the WIA'91 with the effect set out in Section 133.
4. In order to avoid confusion, in appropriate cases, the Environment Agency may agree to hold back on the SCE procedures under the WIA'91 until it is in a position to consider any representations of the Sewerage Undertaker (and others), before either granting the PPC permit or refusing the application.
5. If in its response to consultation, the Sewerage Undertaker has told the Environment Agency that consent will not be given at the levels proposed, that is the discharge cannot be legally made, then the Environment Agency should not proceed further with the PPC application until the trade effluent issue has been resolved.
6. If the PPC application is refused or held in abeyance, the sewerage undertaker will refer the discharge of SCE and the Agency is likely to apply in its Notice of Determination the limit considered appropriate under PPC.
7. The applicant may then exercise his right of appeal under the WIA'91 against any tighter effluent standard imposed by the Sewerage Undertaker. If the more stringent standard were upheld, the operator would have to propose either process modification or an alternative effluent disposal strategy in his subsequent application for PPC permit.
8. Once the PPC application is determined, special category trade effluent ceases to be so. At the earliest opportunity, the Sewerage Undertaker should issue a direction to vary the consent in order to mirror the conditions in the PPC permit and to remove the Notice of Determination. It should be remembered that the Sewerage Undertaker has the power to set limits on any specified constituent of the effluent, and these limits may be more stringent than the ones set by the Environment Agency. PPC permit conditions are mirrored in the trade effluent consent in order that the Sewerage Undertaker can act independently of the Environment Agency if circumstances necessitate.
9. Each party should advise the other when further trade effluent directions or PPC variations are proposed in respect of new or changed limits on prescribed substances. Firstly, to ensure that either party is aware of such changes and second to ensure that limits for prescribed substances in trade effluent consents are not higher than those set by the Environment Agency in the PPC permit.

10. Finally, where a Sewerage Undertaker refers SCE to the Environment Agency, as a general point of principle, the Environment Agency will always consider and determine the matter that was the subject of the referral. If the discharger ceases to trade or changes his proposal before the reference is determined, the Environment Agency will serve a Notice of Determination which will:-
- Prohibit the proposed operation, or
 - Prohibit the discharge of prescribed substance at concentrations greater than background, or
 - Set conditions according to the principle of best technical means available (BTMA)
11. In all cases, the Sewerage Undertaker will incorporate the Notice of Determination in the consent, direction or letter refusing consent and place a copy on record to be available for inspection by the public (Section 196 WIA'91)

A9 GLOSSARY OF TERMS AND LEGISLATION

Glossary

<i>Applicant</i>	The legal 'person' applying for a permit to operate all or part of a PPC installation.
<i>BAT</i>	Best Available Techniques – Techniques developed to a scale capable of being implemented in a given industrial sector and delivering the most effective level of protection of the environment as a whole, taking into account the costs of implementing it.
<i>Co-treatment</i>	Treatment of trade effluent at a WwTW in combination with domestic sewage and other waste waters.
<i>CSO</i>	Combined Sewer Overflow – a discharge point on a sewerage system, which is designed to spill under high storm flows.
<i>Dangerous Substances</i>	Potentially toxic chemicals defined and regulated under the Dangerous Substances Directive (76/464/EEC).
<i>EO</i>	Emergency Overflow – a discharge point on a sewerage system at, or upstream of, a sewage pumping station which is designed to overflow if the pumping station fails.
<i>EQS</i>	Environmental Quality Standard – the concentration of a substance in the environment below which it should have no environmental impact.
<i>EU Directives</i>	European Union Directives – Legislative requirements made by the European Union which are binding on member states.
<i>Installation</i>	A collection of technically connected activities on the same site which are listed in the PPC Regulations together with any technically connected unlisted directly associated activities on the same site which could have an effect on emissions.
<i>IPC</i>	Integrated Pollution Control – as defined in the Environmental Protection Act 1990, Part 1.
<i>List 1</i>	These are the most toxic, persistent or bioaccumulative dangerous substances, which are defined in List 1 of the Dangerous Substances Directive.
<i>Non-Departmental Public Body</i>	A statutory body which is not part of the Government, but which carries out executive functions.
<i>Operator</i>	The legal 'person' responsible for undertaking a listed activity or directly associated activity at a PPC installation.
<i>Part A(1)</i>	Higher risk PPC installations, which are regulated by the Environment Agency.
<i>Part A(2)</i>	Lower risk PPC installations which are likely to be regulated by the Local Authority.
<i>PPC</i>	Pollution prevention and control regime implementing the Pollution Prevention and Control (England and Wales) Regulations (as amended) – SI 2000/1973.
<i>Prescribed Substances</i>	A potentially toxic substance prescribed for control under the Special Category Effluent provisions of the Water Industry Act 1991.
<i>Pre-treatment</i>	Treatment of trade effluent at the installation where it is produced to remove or reduce the quantity of certain components prior to discharge of the remaining effluent to a sewer for further treatment at a WwTW.
<i>SCE</i>	Special category effluent – as defined in the Water Industry Act 1991.
<i>Trade effluent</i>	All discharges of non-domestic waste from trade premises.
<i>Vested</i>	The sewers, WwTWs and other assets of the water companies are public assets that are vested in the companies by their operating licences for the duration of the licence.

Relevant Legislation

1. The Waste Framework Directive (75/442/EEC)
2. The Dangerous Substances Directive (76/464/EEC)
3. The Trade Effluents (Prescribed Processes and Substances) Regulations 1989
4. The Environmental Protection Act 1990
5. The Water Industry Act 1991 (WIA'91)
6. The Water Resources Act 1991
7. The Radioactive Substances Act 1993
8. The Urban Waste Water Treatment Regulations 1994
9. The Environment Act 1995
10. The Integrated Pollution Prevention and Control Directive (96/61/EC)
11. The Pollution Prevention and Control (England and Wales) Regulations 2000