

IMPEL Reference Book for Environmental Inspection



**IMPEL
NETWORK**

European Union Network for the Implementation and Enforcement
of Environmental Law

June 1999

FOREWORD

At the request of IMPEL, the document IMPEL Reference Book for Environmental Inspection was prepared by the ad hoc working group initiated by Standing Committee 2.

The purpose of the IMPEL Reference Book is to provide a tool to environmental inspectors in the European Union.

This reference book is meant for senior and middle managers as well as field inspectors. The top and middle management will find useful information on the administrative and inspection framework as well as on the organisation of inspectorates in EU Member States. Field inspectors will find a step-by-step and practical approach for inspection work. The step-by-step approach is supported by practical examples from all EU Member States.

Part III of this Reference Book is considered to be the most relevant for the work of the inspectors. Together with the other parts of the Reference Book, it is envisaged that it will be contributing to:

- Improvement of human resources management and financial planning by senior and middle management, and strengthening of the institutional framework of the inspectorates through the presentation of state-of-the-art management techniques related to running inspectorates, and descriptions of management aspects of inspectorates EU-wide.
- Review, and if possible measurement, of the quality of the inspectorates' performance, and measurement of the quality of compliance activities by competent authorities, including evaluation of their effectiveness.

Nijmegen, March 1999

CONTENTS

| | page |
|---|------|
| PART I: IMPEL REFERENCE BOOK FOR ENVIRONMENTAL INSPECTION: AN INTRODUCTION | |
| 1. INTRODUCTION | 1 |
| 1.1 Background | 1 |
| 1.2 Context of the project | 1 |
| 1.2.1 The implementation link | 3 |
| 1.2.2 The enforcement link | 3 |
| 1.3 History of the IMPEL network | 4 |
| 1.4 Composition of the IMPEL Working Group | 5 |
| 1.5 Purpose of the IMPEL Reference Book for Environmental Inspectors | 5 |
| 1.6 Structure of the Reference Book for Environmental Inspectors | 5 |
| PART II: INSPECTION IN EU MEMBER STATES: THEORY AND FRAMEWORK | |
| 2. ADMINISTRATIVE FRAMEWORK | 8 |
| 2.1 European legislation | 8 |
| 2.2 Some remarks with respect to different law enforcement systems | 8 |
| 2.3 2.4 Legal and permitting framework in the EU Member States | 9 |
| 3. INSPECTION FRAMEWORK | 19 |
| 3.1 Development of environmental legislation | 19 |
| 3.2 Licences (and/or authorisations) | 19 |
| 3.3 Implementation | 19 |
| 3.4 Compliance checking and enforcement | 19 |
| 3.5 Non-compliance | 20 |
| 4. ORGANISATION | 21 |
| 4.1 Introduction | 21 |
| 4.2 Short overview of the organisation of inspection in the EU Member States | 21 |
| 5. INSPECTION | 34 |
| 5.1 Introduction | 34 |
| 5.2 Status and priority setting | 34 |
| 5.2.1 Status | 34 |
| 5.2.2 Priority setting | 35 |
| 5.3 Preparation of the on-site visit | 36 |
| 5.4 On-site visit | 36 |
| 5.5 Desk study inspection as an alternative to on-site inspection | 37 |
| 5.6 Follow-up | 38 |
| 5.7 Enforcement | 40 |
| 6. QUALITY MANAGEMENT | 43 |

| | |
|---|-----|
| 6.1 Introduction | 43 |
| 6.2 Improvement of inspection quality | 43 |
| 6.3 Inspection report | 44 |
| 6.4 Performance of the inspection body | 44 |
| | |
| 7. COMMUNICATION | 46 |
| 7.1 Introduction | 46 |
| 7.2 Negotiation and conflict handling | 46 |
| 7.3 Communication activities related to public relations | 48 |
| 7.4 Communication activities related to public support | 48 |
| 7.5 Communication as a tool in compliance promotion | 48 |
| | |
| PART III: INSPECTION IN EU MEMBER STATES: A PRACTICAL GUIDE FOR INSPECTORS | |
| | |
| 8. INSPECTION PLANNING | 51 |
| 8.1 Introduction | 51 |
| 8.2 General approach | 51 |
| 8.3 Updating information | 51 |
| 8.4 Categories of inspection | 52 |
| 8.5 Frequency of inspections | 53 |
| 8.6 Checklist | 60 |
| | |
| 9. PREPARATION OF ON-SITE VISIT | 65 |
| 9.1 Preparation of the inspection visit | 65 |
| 9.2 Development of the Inspection Plan | 65 |
| 9.3 The elements of the Inspection Plan | 67 |
| 9.4 Inspection tools | 68 |
| | |
| 10. ON-SITE VISIT | 70 |
| 10.1 Introduction | 70 |
| 10.2 Start of the on-site visit | 70 |
| 10.3 Presence of the inspector on site | 72 |
| 10.4 Compliance checking | 73 |
| 10.5 Announced or unannounced inspections? | 75 |
| 10.6 Visits in response to incidents | 77 |
| 10.7 Completion of the site visit | 78 |
| 10.8 Other issues | 79 |
| | |
| 11. INSPECTION REPORT | 85 |
| 11.1 General | 85 |
| 11.2 Conclusions regarding compliance | 85 |
| 11.3 Example of inspection report outline | 86 |
| 11.4 Checklist and example of an inspection report | 88 |
| 11.5 Operator performance schedule: example from Scotland | 96 |
| 11.6 Inspection follow-up | 104 |

PART IV:

ANNEXES

- ANNEX 1: GLOSSARY
- ANNEX 2: RELEVANT ADDRESSES
- ANNEX 3: ENVIRONMENTAL MANAGEMENT SYSTEMS
- ANNEX 4: INDUSTRIAL PRODUCTION PROCESSES
- ANNEX 5: LITERATURE ON INSPECTION
- ANNEX 6: EU-DIRECTIVES
- ANNEX 7: GUIDANCE NOTES (EXAMPLE FROM UNITED KINGDOM)
- ANNEX 8: INSPECTION REPORT (EXAMPLE FROM PORTUGAL)

IMPEL REFERENCE BOOK FOR ENVIRONMENTAL INSPECTION

PART I: IMPEL Reference Book for
Environmental Inspection:
An Introduction

Section 1: Introduction

1. INTRODUCTION

1.1 Background

In recent years, the EU has rapidly developed environmental policy and legislation in order to harmonise the environmental requirements imposed on industry within the EU. Member States have largely brought their national environmental legislation and policies in line with EU requirements. The tasks and responsibilities of environmental enforcement inspectorates in EU Member States have become more complicated. This is partly the result of the harmonisation of national legislation with EU requirements, and partly the result of the development of self-regulatory instruments like Environmental Management Systems. The organisation of inspectorates and the constraints faced in day to day practice can vary widely among the EU Member States.

At the request of IMPEL this document:entitled “*IMPEL Reference Book for environmental inspection*” was prepared. It presents basic tools for the management of inspectorates and serves as a reference guide for the work of inspectors.

1.2 Context of the project

The tasks and responsibilities of inspectorates are primarily:

- implementation of environmental legislation;
- enforcement of environmental legislation

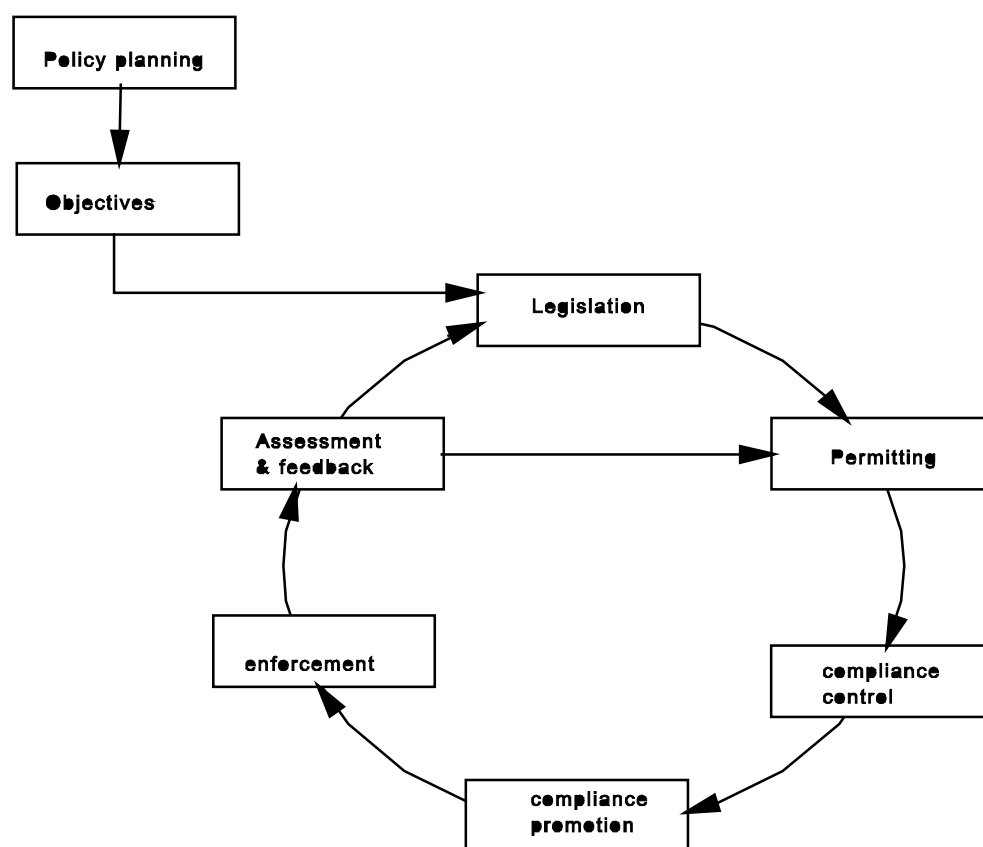
This Reference Book is the output from a project focused on the provision of a tool for inspectors within the EU, describing the major aspects of implementation and enforcement.

The system of implementation and enforcement can be visualised by means of the so-called regulatory cycle. This regulatory cycle consists of the following links:

- the development of legislation;
- permitting;
- implementation (consisting of compliance control and compliance promotion);
- enforcement.

Of course there are varieties between the different Member States in terms of individual chains of regulation, but the main principle of the regulatory cycle is shown in scheme 1.1.

In most Member States the enforcement, legislation and system of licenses are well developed and also include the implementation. However, it has been observed, that enforcement may be underdeveloped and to some extent neglected.



Scheme 1.1: The regulatory Cycle

The regulatory process is the process by which the different competent authorities take action to implement the regulatory cycle. Consequently, the process comprises all activities that contribute directly or indirectly to the observance of the legislation.

This means:

- A) promotion of voluntary observance by providing information and supervision;
- B) the measuring of the observance by controlling and inspections;
- C) if situations of non-compliance occur, to consult further and to threaten with sanctions;
- D) commanding observance by using the sanctions under administrative law and/or private law.

It will be the mission of an inspector in Europe to play an important role in this process.

1.2.1 The implementation link

For inspectorates, implementation means checking and promoting compliance . Companies are the main actors in implementation but inspectorates together with other competent authorities create the necessary conditions. Implementation mainly consists of activities which companies undertake to comply with legislation. Although this shared responsibility for implementation may lead to weakness of the implementation link, it also offers a unique possibility for the public and the private sector to co-operate.

IMPEL has described minimum criteria for inspections, which mainly focus on inspection and site visit based approaches to the compliance control and compliance promotion steps in the regulatory cycle. These minimum standards are used throughout this reference book.

A few examples of problems that can arise in connection with implementation are as follows:

- little attention is sometimes paid to aspects of implementation in the formulation of policy. For example the personnel and financial resources made available to ensure a proper implementation are not always adequate;
- the NIMBY (“not-in-my-backyard”) syndrome, which is particularly relevant in the case of waste disposal; both the authorities and the target groups want to have the problem solved, but preferably as far away from them as possible;
- the government bodies do not always have practical knowledge about the effective implementation of the legislation.

1.2.2 The enforcement link

Enforcement is the application of statutory means of coercion and sanctions to ensure compliance in a situation where it has been established that there is non-compliance with an act or regulation.

Lessons learned from enforcement in practice provide a basis for drafting new laws and rules or amending existing laws and rules. The evaluation of enforcement practices may also result in modifications to existing policy.

Environmental inspectors should always keep in mind that if they want to enforce, the environmental licence should be enforceable and stand in court (if necessary).

Some examples of difficulties that can occur in connection with enforcement are as follows:

- the conditions in the licence are too general/ not detailed enough, as a result of which enforcement is complicated. It is not clear how to enforce without clear obligations for the owner of the site
- the enforcing authority has limited skills on some subjects. The practical knowledge within the environmental authorities on how enforcement can be carried out efficiently is not always present;
- in some Member States part of the enforcing is done by social control of the community;
- a number of Member States lack a clear division of the responsibilities. In that case the enforcement system is vulnerable because of the large number of authorities having responsibilities and functions (ministries, provinces, municipalities, water boards, police, ...).

1.3 History of the IMPEL network

The European Union Network for the Implementation and Enforcement of Environmental Law was formed in 1992. Its common objectives are to create the necessary impetus in the Community to make progress on ensuring a more effective application of environmental legislation. To achieve this the network has set itself the task of promoting the exchange of information and experience and the development of greater consistency of approach in the implementation, application, and enforcement of environmental legislation, with a special emphasis on Community environmental legislation. It will provide a framework for policy makers, environmental inspectors and enforcement officers to exchange ideas both jointly and separately and to encourage the development of enforcement structures.

The network meets in Plenary Meetings and considers broad issues related to implementation and enforcement as well as approving the work programmes and agreeing upon the annual budgets. The network consists of: Plenary meetings and ad hoc Working Groups for specific topics.

The plenary meeting decides on horizontal and strategic issues, approves the work programmes of the Standing Committees, and agrees upon the annual budgets.

Ad-hoc working groups are initiated to cover specific short term projects.

A secretariat was added to the network in order to ensure continuity of the IMPEL activities and to assist the country which holds the EU presidency in hosting and organising the plenary meeting of the Network.

1.4 Composition of the IMPEL Working Group

In order to make a Reference Book in line with the IMPEL objectives, an ad hoc working group was set up composed of the following members:

Project leader:

- Danish EPA
- * Mr Gudmund Nielsen

Project team members:

- Austrian Ministry of Environment, Youth and Family Affairs
- * Mr Josef Behofsics
- Provincial Government of Styria, Austria
- * Mr Alfred Hammler
- Belgium (Flemish) Environment Inspection
- * Mr Peter Schryvers.
- Irish EPA
- * Mr Frank Ryan
- Netherlands Inspectorate General for the Environment
- * Mr Rob Glaser
- DCMR Environmental Protection Agency, Netherlands
- * Mr Achmed Nurmohamed
- Portuguese Inspectorate General for the Environment
- * Ms Ana Magro e Silva
- Scottish EPA, United Kingdom
- * Mr Ken MacDonald

1.5 Purpose of the IMPEL Reference Book for Environmental Inspectors

The purpose of the IMPEL Reference Book is to provide EU environmental inspectors with a tool on inspections, which presents basic material, that can be used in the day-to-day operations of the inspectors. The objectives are:

- development of a consistent approach to site visits (preparation, execution and follow-up).
- review of the impact of EMS auditing and reporting of companies on tasks and responsibilities of inspectors;

1.6 Structure of the Reference Book for Environmental Inspectors

The reference book contains four parts:

Part I provides an introduction to the reference book.

Part II contains the theory and framework of inspection activities in EU Member States.

This includes both the administrative and inspection framework as well as organisational aspects and aspects important for the actual inspection. Information is also included on quality management and communication.

Part III is a practical guide for field inspectors.

Part IV contains annexes.

At several places in the text, examples of the subject dealt with are given based on the practices in various Member States. These sections are printed in smaller text size.

IMPEL REFERENCE BOOK FOR ENVIRONMENTAL INSPECTION

PART II: Inspection in EU Member States: Theory and Framework

Section 2: Administrative framework

Section 3: Inspection framework

Section 4: Organisation

Section 5: Inspection

Section 6: Quality management

Section 7: Communication around inspections

2. ADMINISTRATIVE FRAMEWORK

2.1 European legislation

European Union legislation has been a major driving force behind most of the recent environmental legislation introduced in the Member States. In all Member States, licences are required in order to set up and operate major industrial installations. In most Member States, legislation related to permitting is developed by the central government and applied nationally. In some Member States however, considerable legislative power is delegated to regions.

In all Member States, the Ministry of Environment (or an equivalent) is the lead ministry in developing environmental legislation. In a number of Member States, other ministries or agencies take the lead in certain sectors.

Member States have developed different approaches to permitting legislation. There might be separate pieces of legislation for the environmental media (water, air, waste etc.) or integrated permitting in which one piece of legislation provides for the co-ordination of all permits. There might even be integrated pollution control in which a single license takes account of the emissions to all environmental media.

The body of EU legislation is quite large and covers the following main areas:

- I. Water
- II. Control of Air Pollution
- III. Waste
- IV. Harmful substances: chemicals
- V. Noise

An overview of the most relevant EU-Directives is given in Annex 6. The list contains a number of well-known Directives, such as the Seveso-Directive (Council Directive 82/501/EEC of 24 June 1982 on the major accidents hazards of certain industrial activities), the Seveso II Directive (Control of Major Accident Hazards Council Directive 96/82/EC) and the IPPC-Directive (Council Directive 96/61/EC of 24 Sep.1996 concerning Integrated Pollution Prevention and Control).

EU-Directives that specifically deal with Inspection have not yet been developed.

2.2 Some remarks with respect to different law enforcement systems

Although over the last decades much work has been done on harmonisation, environmental legislation in the Member States still contain significant differences. It goes beyond the framework of this Reference Book to present and discuss in detail all the differences between the legislation in the Member States. In section 2.3., however, some of the most relevant aspects are briefly presented.

2.3 Legal and permitting framework in the EU Member States

Compliance with environmental legislation is achieved by, among other things, public law enforcement, which can be divided into administrative law, criminal law, and private law enforcement. Most EU Member States have these three categories of laws.

The environmental inspector mainly makes use of administrative law enforcement instruments. In doing this, the environmental inspector forms part of the administrative system enforcing the environmental administrative rules.

Administrative law

Application of administrative law is the first tool for a governmental body which wants to control (non-)governmental institutes, companies or common people. Administrative law is generally initiated by environmental inspectors who explain why a company is in non-compliance

Officials of the competent authorities may have the following administrative law powers to make supervision possible:

- demand to inspect and take copies of books and other business records;
- halt means of transport and search their cargoes;
- enter all places with equipment (except private houses);
- arrange to be accompanied by other persons when they enter premises;
- list, examine and take samples of goods
- inspect processes and emissions.

The following administrative sanctions can be applied:

- exercise **executive coercion**: i.e. to take remedial action at the expense of the offender;
- impose **penalty payments**: i.e. a penalty which applies as long as the person/firm in question infringes the rules and which has to be paid per period of time that the infringement lasts or per offence [= coercion sum or environmental performance bond] (** Penalty payments are not possible in all Member States*);
- change the licence or the exemption;
- (partially) cancel the licence or the exemption;
- use of a formal letter or notice to require the offender to take remedial action.

The next scheme shows the measures, which may be applicable under administrative law and the circumstances where these measures are applied.

Scheme 5: Administrative legal framework for enforcement

| Measures under administrative law | Circumstances where these measures are applied |
|---|---|
| Compulsory measures (notices, letters, orders, advice etc.) | <ul style="list-style-type: none"> – to end a situation of non-compliance – remedial action at the cost of the offender |
| Fines | <ul style="list-style-type: none"> – stimulation to correct a situation of non-compliance |
| Withdrawal of the licence | <ul style="list-style-type: none"> – when the conditions are violated. withdrawal may be possible immediately or only after a period of time, so the violator has time to end the situation of non-compliance with the conditions stated in the licence – after conviction by court |

Compliance with the regulations must be achievable; the regulations must not require the impossible. If necessary they should be able to stand in court. It is important that enforcement activities are visible to the public. In the context of enforcement systems follow up procedures might result in the use of criminal law enforcement.

Criminal law

In most EU Member States criminal law is another tool that can be used, which will in most cases be applied after the public prosecutor has been informed of the infringement. The public prosecutor will decide whether to prosecute or not. At this stage the local government, or environmental authority including the environmental inspectors, are no longer in control. Therefore criminal law is excluded from the reference book.

Scheme 6: Criminal legal framework for enforcement

| Measures under criminal law | Circumstances where these measures are applied |
|------------------------------------|--|
| Penalties | <ul style="list-style-type: none"> – to end a situation of non-compliance (after administrative measures have been applied) |
| Imprisonment | <ul style="list-style-type: none"> – sanctions in case of persistent, repeat and/or serious cases of non-compliance |

Examples of law systems applied

Of course different Member States make different use of the law system. It might for instance be possible that inspectors in some way influence the public prosecutors in their decision on whether to prosecute or not. It is also possible in a few Member States for inspectors to make use of the private law system.

Austria

In Austria administrative law is the first tool for achieving environmental regulations. The company needs a licence under the industrial act, under the water act or under the waste act, depending on the characteristics of the various types of the industrial activities. The authority then concerned gives the licence and carries out the inspections. There is no special inspecting organisation. In case of non-compliance different scenarios are possible, for example to concede a time period to restore the original situation, to impose a fine or to close down the facility or parts of them, depending on the degree of the violation.

The second tool is criminal law. It applies in parallel to administrative law. It will be made use of when the public prosecutor has been informed of a serious extent of environmental pollution. This information can come from the neighbourhood, from the public, from the police, from the authority or from anybody else. Depending on the degree of the pollution penalties or imprisonment are available.

Belgium

The three Belgian regions (the Flemish, the Wallonian and the Brussels Capital Region) have exclusive powers for setting up and implementing legislation. The regions have their own legislative and executive power. Each regional government has a minister for the environment, assisted by their environmental administrations.

Legislative powers of the regions are embedded in decrees or ordinances with comparable legal force as federal laws. Since the regions do not have their own judicial power criminal violations of the regional environmental legislation are prosecuted and punished by the federal judicial system.

Flanders

In Flanders, the Environment Inspection Section is exclusively competent for enforcing the legislation relating to environmental health. In case of non-compliance, the inspector has to draw up official record of infringement and send it to the Public Prosecutor. At the same time, instructions are given to initiate cleaning-up projects. These projects are followed and evaluated by the environmental inspector.

Moreover, the inspector can

- carry out measures of administrative law (going to the sealing of an installation);
- propose administrative sanctions to the licensing authority (request to suspend or withdraw the licence);
- impose administrative fines (in a limited number of infringements).

Brussels Capital Region

The main mission of the Inspection and Surveillance Division of the Brussels Institute of Environmental Management is to prevent pollution in the environment's various sectors (air, water, noise, waste, soil, energy, and nature, in fact all environmental sectors except waste-transit and all nuclear energy issues) in the Brussels Capital Region through control and preventive actions.

Control actions are mainly carried out following complaints from individuals or associations, as well as at the request of the police, firemen, community services, gendarmes, political authorities and others. The environmental inspection can carry out measures of administrative law, propose the withdrawal or the suspension of an environmental license and will have in the near future the possibility of imposing administrative fines to all infringements of the regional administrative legislation.

The preventive approach consists of monitoring compliance with the conditions set out in the environmental licence and in environmental legislation in general. Therefore, a narrow collaboration with all licence-issuing authorities (the communities and the Division Authorisation & Prevention of the BIME) is established.

Denmark

The principal law on environmental protection is the **Environmental Protection Act**, originally drafted in 1973, last amended in 1991 and consolidated in 1997. The Act establishes a system of integrated permitting to control emissions to air, water and soil. It applies to all enterprises with emissions to the environment and is supplemented by Orders and guidelines as shown in the table below.

The permitting system has tiers depending on the type and nature of the activity:

- the most complex activities require a license from the Counties;
- the less complex activities require a license from the Municipalities;
- the least complex activities must notify the Municipalities of their operations.
- a number of similar branches (fur farms, auto repair shops etc.) are regulated by specific branch ordinances

Principal laws, orders and guidelines establishing the permitting regime for industrial installations in Denmark.

Licences are issued for a minimum period of eight years (the period of legal protection), unless new environmental hazards or information on pollution effects arises which were not predictable when the license was granted.

In summary: The inspectors have the following enforcement tools available in case of non-compliance:

- send notices and official warnings;
- prohibit continued operation and, where required, order the removal of the activity;
- order the responsible party to restore the original situation;
- - have ordered measures to be taken at the expense of the responsible party, after the specified time limit has expired.

The police may initiate legal action in response to reports from county or municipal officials. In serious cases, which are prosecuted under criminal law, fines may be imposed and also imprisonment is possible.

Finland

Finnish environmental pollution legislation has traditionally been sector-oriented, with separate laws for water, soil and air (see Table). **The Environmental Licence Procedures (EPPA)**, were adopted in April 1991 and entered into force in 1992. They are the first step towards an integrated inspection system, gathering together licence procedures for sectors such as air, waste, health and neighbourhood, incorporated from their corresponding Acts (see table). The water pollution prevention legislation remains outside these provisions, and therefore there are two permitting systems:

- the **Environmental licence**: provided for under the EPPA. This licence covers emissions of pollutants to air, noise abatement and solid waste production. According to the EPPA and based on the geographical extension of environmental impact, licences are issued by the Regional Environment Centres and the Municipal Environment Protection Boards, for more and less complex installations respectively;
- the **Water licence**: provided for under the Water Act, 1961. This licence covers water discharges and is granted on case by case basis. It is administered by the Regional Water Courts, who grant the licences and enforce cases of non-compliance; and

Principal laws, regulations and guidelines establishing the permitting regime for industrial installations in Finland.

Water licenses issued by the Water Court, as a rule, are valid for a set period of time, usually between three years and ten years. Environmental licenses issued by the Regional Environment Centres or Municipal Environment Protection Boards are valid until further notice. Both types of licences must be reviewed if changes are made to the installations, if new environmental hazards arise or information on effects of pollution is obtained which were not foreseen when the licence was granted.

In Finland, at operational level, 13 Regional Environmental Centres and 414 Municipal Environment Protection Boards are also responsible for supervising compliance and environmental enforcement (besides issuing licences). The Finnish inspection system is mainly based on permitted installations carrying out self-monitoring. The Regional Environment Centres and the Municipal Environment Protection Boards are responsible for compliance supervision of both water and environmental licences. Installations are obliged under the conditions of the water licence to develop a self-monitoring scheme, which has to be approved by the relevant Regional Environment Centres. The Environmental licenses contain detailed conditions on self-monitoring and reporting. The Regional Environment Centres and Municipal Environment Protection Boards also have the power to carry out inspections.

The Regional Environmental Centres and the Municipal Environmental Protection Boards have the responsibility for issuing administrative orders in cases where Environmental licence conditions are not met. They may also impose an order requiring an operator to carry out works at his own expense or prohibit an operation if the terms of the administrative orders are not met. In case a certain operation constitutes a health risk, the Public Health Authority has to powers to prohibit the operation of the installation, unless the installation has an Environmental licence, in which case the powers lie with the Regional Environmental Centres and the Municipal Environmental Protection Boards.

Damages and criminal sanctions caused by violation of the regulations stated in the environmental licenses must be claimed by the authorities in the General District Courts. The Water Courts may impose fines but cannot imprison. However, a prosecutor from the Water Court may take a case to the General District Court which has a right to imprison on conviction.

France

The first general purpose law classifying installations causing nuisances or risks dates back to 1810. Later laws of 1917, 1976, 1985, 1987, 1992, 1993 and 1995 were largely based on this first imperial decree. Installations with a limited impact on the environment must remit a dossier containing a declaration specifying, among other things, the type of activity contemplated. The Prefect examines the dossier's conformity and issues a receipt and a copy of the general requirements that apply to the relevant class of activity.

Installations that involve the most serious risks or inconveniences may not operate without an authorisation from the Prefecture. The authorisation request must include, in particular, an impact assessment and a risk assessment: its scope must also take into consideration the number of foreseeable impacts on the environment.

In France a list of Classified Installations exists. It contains class 1 installations, which require a licence and class 2 installations which require a declaration. Technical aspects of licensing and inspection are the responsibility of the DRIRE (Regional Directorates of Industry, Research and Development), an external service of the Ministry of Industry. There are 24 DRIRE which report to the central government. In case of environmental issues they report to the Ministry of Environment.

The inspector for classified installations verifies compliance with the technical requirements imposed on the installation. The inspector also intervenes in the event a complaint is filed, or if an accident or an incident occurs. If the inspector notes that the requirements are not adequate, he or she may make a recommendation to the Prefect for the imposition, by administrative order, of additional requirements. Should the operator fail to comply with the mandatory provisions under the legislation on classified installations administrative and criminal penalties may apply. The offence must be noted in an official report drafted by an inspector for classified installations or a judicial officer.

Official reports are addressed to the public prosecutor, who may refer the case to the competent court: Police Court, for a petty offence (non-compliance with the requirements, operating without a declaration, failure to declare a change of operator) or the Regional Criminal Court for a misdemeanour (operating without an authorisation, non-compliance with a formal injunction, obstructing the duties of the inspector for classified installations. The court may force the operator to comply with the requirements under court-ordered penalty for non-compliance and impose a fine.

In summary: In case of non-compliance there are administrative and judicial sanctions.

The mechanisms open to the inspectors, through advice to the Prefect who is empowered to impose administrative sanctions, include:

- placing funds in trust;
- the Prefect can organise the undertaking of the works required and claim costs back from the polluting facility;
- the plant can be closed by a signed order from the Prefect.

The judicial routes involve inspectors laying a complaint with the Public Prosecutor.

Germany

In case of non-compliance inspectors issue warning notices. Continued failure to comply results in the issue of a formal compliance notice. Inspectors are empowered to close down installations. Failure to comply may result in court action. Inspectors are empowered to impose administrative fines. If fines are not effective, cases may be passed to the public prosecutor.

Greece

The Greek Ministry of the Environment, Physical Planning and Public Works is responsible among others for issuing the “Environmental License” (according the Environmental Impact Assessment) of the big (category A) installations and for the environmental inspections. The Departments of the Environment in Local Authorities (Prefectures), are responsible for license/inspection procedures for smaller installations. In the future the inspections will be performed by a new Environmental Inspection/Enforcement Mechanism (“INSPECTORATE”), for the establishment of which a study has been completed.

In case of non-compliance there is a staged approach. At first a written warning is issued which is signed by the Prefecture and includes a timetable for actions. If the actions required are not taken, administrative fines can be imposed by the Prefecture on the advice of the inspectors. The Prefecture can order the facility to close down. There is an appeal procedure against fines. If violations persist, the Ministries of Environment, Health and Industry can also impose fines to a higher ceiling. The Ministries can also impose new license conditions and close a facility.

There is a provision for imprisonment for violations. Administrative fines may be imposed.

Ireland

Enforcement actions in case of non-compliance range from an informal action such as oral contact, up to a formal action such as legal proceedings. Each informal enforcement notice may require the licensee to submit information. A formal enforcement action requires a specific response to be taken by the licensee within a specified time frame. The response is reviewed to determine whether further action is warranted.

The decision on how to respond to a case of non-compliance is usually left to the enforcement section. In case of non-compliance the enforcement section will check the case of non-compliance to assess how serious the case is and how it should be dealt with.

Administrative fines are not available but criminal sanctions may be imposed by the courts as a result of action taken by the public prosecutor on advice of the authorities. Criminal law provides that it is a criminal offence for any person to cause or license polluting matter to enter waterways, or for the occupier of any premises to cause or license an emission from any premises in such a quantity or in such a manner as to be a nuisance. Also a person shall not hold, transport, recover or dispose of waste in a manner that causes or is likely to cause environmental pollution.

Civil law licenses any person to apply to the appropriate court where any person is causing pollution as defined under the water and air pollution acts and the waste acts.

Personal liability sanctions are available, including imprisonment.

Italy

Non-compliance with licences is dealt with initially by the local health authorities which issue warnings. The regional authorities are empowered to suspend organisations and revoke licenses. Units of police are situated in the ministries of environment and health to support enforcement actions.

Non-compliance may result in fines or imprisonment. Legal action may be initiated by the region and by citizens.

Luxembourg

The legislation provides for administrative sanctions which can be applied by the environment agency or the mayor. Administrative sanctions include notices requiring particular action within a defined period, and also temporary or permanent closure of the plant. In practice, the

administrative sanctions are used in the case of major problems. Where non-compliance is less severe, the judicial processes are invoked.

This is started by inspectors making a formal complaint to the judicial system. There are now specialist staff within the Public Prosecutors' office who are responsible for proceeding with these cases through the judicial system.

The legislation provides for fine or imprisonment of directors and for confiscation of equipment.

The Netherlands

Environmental regulation in the Netherlands is highly fragmented. At the policy level, the Ministry of Housing Spatial Planning and the Environment (VROM) develops and co-ordinates general environmental policies and the Ministry of Transport, Public Works and Water Management (V&W) develops those relating to water management. At an operational level central organisations (the Inspectorate for the Environment and Rijkswaterstaat), the directly elected Provinces (12), the Water Boards (68 and 25 water quality managers) and the Municipalities (572) all have an important role in environmental inspection and enforcement.

There are three distinct approaches to non-compliance situations. Non-compliance to hazardous waste regulations generally directly results in court action. Major installations are first given a time period to make modifications. If responses are inadequate, court action is initiated. For minor installation, initial action focuses on education and persuasion. This may then be followed by definite time periods being set for improvement and finally by court action. Local authorities may close down facilities. To initiate legal action, inspectors' reports are forwarded to the police/public prosecutor who then takes over the enforcement process. Inspectors give advice to the police and the Public Prosecutor. Training programmes have been established for police and public prosecution staff.

Civil and administrative sanctions are applied more frequently than criminal sanctions. Local authorities may impose administrative fines and courts may impose fines and imprisonment. An appeal system is in force in all cases.

Portugal

The enforcement of non-compliance depends on how serious the case of non compliance is. However, in general in a case of non compliance the inspector will issue a warning or a prohibition notice during the on site visit , depending on his own judgement of how serious the case is, after checking licences and authorisations, self monitoring and other documents. A warning notice will always be followed by a second on site visit to check the new situation after the deadline past prescribed in the notice. Sometimes there are warning notices only for administrative purposes, where the process is ended if the operator sends the documents before the deadline. The prohibition notice together with the inspection report and documents attached are the first documents of the file for each installation to be completed with administrative information and later on with the administrative fine. An appeal against the fine is possible. When there is failure to pay administrative fines, the process will end in a court case.

The environmental law system depends up on the administrative law, being the penal law a complement of the Portuguese legal system.

Spain

Warnings may be issued by inspectors and administrative fines can be imposed by the regional ministries, water basin agencies and municipalities. Depending on the environmental risk of non-compliance issues, an administrative fine can be imposed, the licence might be revoked or installations may be (temporarily) closed down. Non-compliance issues may also result in court proceedings under the criminal code for environmental damage. Imprisonment is possible.

There are no standard procedures which describe how enforcement in non-compliance cases should be executed. The enforcement response differs between the various kinds of industrial facilities and the potential environmental risk. In case of a low potential environmental risk, first a warning will be issued, then an administrative fine will be imposed and after that the installation will be (temporarily) closed down. The inspector can decide upon closure on behalf of the inspecting body.

In case of a high potential environmental risk (direct danger) an installation will be closed down immediately.

Sometimes also criminal law is applicable to cases of non-compliance. In that case the public prosecutor will be involved and a court will decide upon the sanctions. It is possible to impose both administrative and criminal sanctions simultaneously.

Sweden

The supervisory authority (CAB or EPHC, see chapter 4) has several instruments when enforcing the environmental legislation. The system of operator self monitoring is an important part of the supervision. It is founded on the principle of the reversed burden of proof, which has been a part of the environmental law since 1969. A legislation reform in 1999 has made the operator's responsibility for self monitoring even stronger. For activities where no licence is required, the supervisory authority may issue an injunction concerning such precautionary measures or prohibitions as are necessary for compliance with the permissibility rules. Should a licensee disregard any condition specified in the licence, the supervisory authority may enjoin him to rectify the matter. In its injunctions, a supervisory authority may impose fines. Should anyone fail to observe the provisions of an injunction or disregard any conditions specified in a licence, the supervisory authority may order rectification at his expense. A supervisory authority may enjoin the proprietor to submit the required information. It may also enjoin the operator to carry out investigations into the activity and the actions necessary for the fulfilment of supervision. If it is found to be appropriate, it may be prescribed that an investigation must be carried out by someone other than the operator, and the supervisory authority may appoint a person. The performer of the activity must bear the cost of such an investigation. It is incumbent on the supervisory authorities to seek to ensure that offenders under the Environment Code are taken to court. If a prosecution is initiated by a prosecutor, the case is handled in a general court of law.

United Kingdom

Under the terms of various Acts (principally the Environment Act 1995), inspectors have the right to enter premises, carry out inspections, remove samples, interview staff etc. In many instances, triggers for formal enforcement action are set at Agency or national level. It is the duty of the inspector to compare a regulated company's performance with requirements and, in consultation with colleagues and senior staff to initiate formal action where appropriate. Non-compliance may result in the issue of warning letters or notice (prohibition notices, enforcement notices etc.). The next step is legal action through the courts. Reports regarding such action will be written by the inspector, and these may include reports to the public prosecution service in Scotland. In England and Wales, the public prosecutor is not involved. Instead the Environment Agency (see chapter 4) has its own legal experts and instigates its own legal proceedings.

Prosecution may lead to the obligation to pay fines or restore environmental damage.

3. INSPECTION FRAMEWORK

3.1 Development of environmental legislation

The first link in the Regulatory Cycle includes the development of environmental legislation. Legislation commonly takes the form of framework legislation which establishes general requirements and implementing legislation which provides details. Standards may be included in the legislation or set out in separate guidelines or other guidance documents.

3.2 Licences (and/or authorisations)

Licences specify detailed requirements for individual installations. The form and scope of legislation relating to licensing varies widely. Consequently there are differences in the types of licences required to set up and operate installations. It may be necessary to obtain several sectoral licences or a single integrated licence.

3.3 Implementation

Implementation comprises the methods and practices used by regulatory bodies to ensure compliance with licensed conditions and to promote improved performance and technological advances. At the same time, implementation of the requirements of licences is a task for the installation to which the licences apply. This shared responsibility for implementation is in most countries the cause of weakness in the implementation link

A few examples of problems that may arise include:

- little attention is sometimes paid to practical aspects of implementation in the development stage of policy. For example personnel and financial resources to ensure proper implementation are not always sufficiently covered;
- government bodies do not always have practical knowledge about effective implementation of legislation.

An important aspect in the implementation chain is the feedback from the authorities to either the policy makers or the licensing authorities.

3.4 Compliance checking and enforcement

Enforcement is the final active process that authorities undertake to ensure that licence requirements are met. It consists of both preventive and reactive enforcement. Preventive enforcement is the regular inspection of companies. Reactive enforcement takes place when a company seriously violates the requirements. In non-compliance situations the authorities may issue warnings or compliance notices and impose administrative, criminal and/or civil sanctions. The enforcement actions available to the authorities vary greatly between countries.

Environmental inspectors should always keep in mind that environmental licences should be enforceable.

Some examples of difficulties in the enforcement chain may include:

- the conditions in the licence are too descriptive, as a result of which enforcement is made complicated;
- the inspector has limited skills in some subjects or he lacks practical knowledge on how to enforce effectively and efficiently;
- in some countries a well developed sense of social responsibility of the entrepreneur enhances the compliance process to the extent that enforcement appears hardly required. The social involvement overtakes the controlling activity of the authorities.
- In a number of EU Member States the distribution of responsibilities between different authorities is not clear.

Also in the enforcement chain the feedback from inspectors to policy makers and licensing authorities is important. Lessons learnt from enforcement in practice contribute to drafting new laws and regulations or amending existing ones.

3.5 Non-compliance

Within the EU Member States, several courses of action may be taken in response to non-compliance. These may include:

- warnings or compliance notices, issued by inspectors;
- prohibition notices, issued by inspectors or authority administrators;
- closing down processes or installations (in case of serious violations with considerable public health risks and/or environmental damage);
- administrative sanctions leading to fines, imposed by inspectors of authority administrators;
- criminal action leading to fines and/or imprisonment usually initiated by the public prosecutor in response to a report from inspectors or authority administrator;
- civil action leading to payment of compensation.

4. ORGANISATION

4.1 Introduction

The organisation of inspection varies widely between the EU Member States. In some countries all inspection activities are carried out under the responsibility of the Ministry of Environment, whereas in other countries responsibilities are delegated to other authorities.

4.2 Short overview of the organisation of inspection in the EU Member States

Austria

Austria has no central inspection system. The licensing authorities in the Länder are also responsible for inspection activities. All permitting activities are covered by three authorities. Depending on the characteristics of the various types of industrial activities, different laws apply and thus different authorities are responsible.

- air pollution and noise aspects are covered by the local authorities (Gewerbebehörde) and have the industrial act (Gewerbeordnung) as legal basis;
- waste aspects are covered by waste authorities (Abfallbehörden) and have the waste act (Abfallwirtschaftsgesetz) as legal basis;
- water pollution aspects are covered by the water authorities (Wasserrechtsbehörden) and have the water act (Wasserrecht) as legal basis.

The industrial act forms the legal basis for most inspections. The act describes which categories need to have a licence and which installations can operate without a licence. This depends on factors like the size of the installation, pollution risks etc.

Belgium

The role of the regions, provinces and municipalities in compliance checking and enforcement varies between the regions.

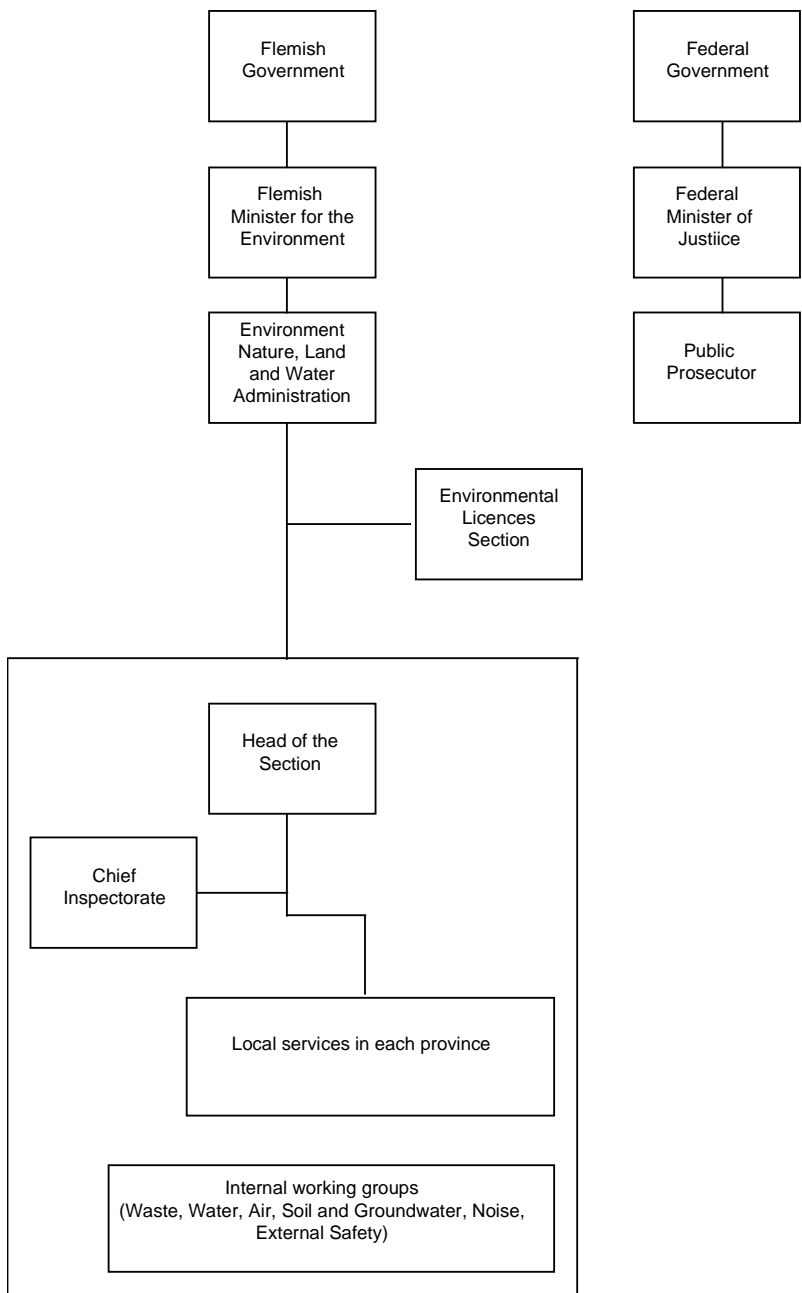
Flanders

In Flanders, the regional Environment Inspection Section is responsible for the first line supervision of more than 10.000 class 1 establishments. This section has a second line supervision of class 2 and 3 establishments, where the first line supervision is given to the municipalities. The organisational structure of this section is as follows:

- the head of the section and his staff;
- provincial implementation departments or local services in each of the five provinces;
- a chief inspectorate to work out the co-ordinated and planned inspections.

The institutional arrangements are summarised in Figure 1.

Figure 1: Institutional arrangements for permitting, inspection and enforcement in Flanders, Belgium.



Brussels Capital Region

The Division Inspection and Surveillance consists of 4 inspection departments: the air/soil, the water/noise, the waste/building sites department and finally the juridical and administrative department.

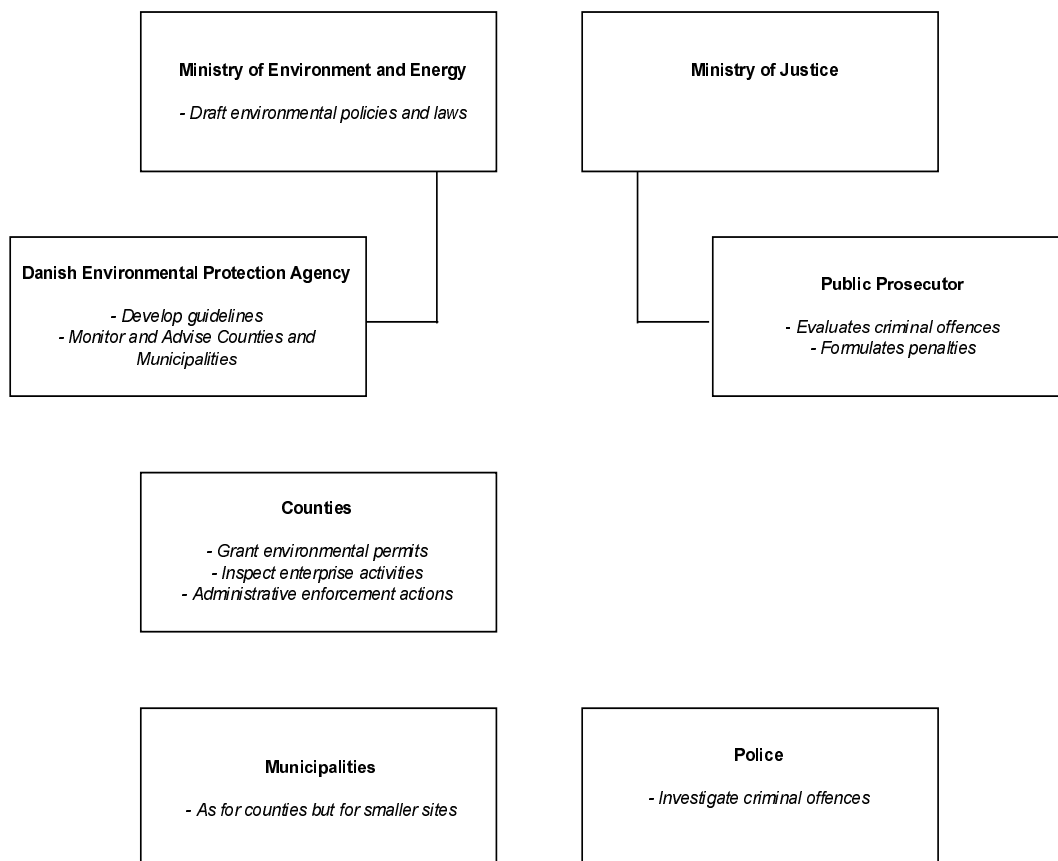
The Division doesn't only act individually; it also attempts to combine its forces with other actors in the field: with community civil servants, the legal authorities, the community police, gendarmes and the customs and excise staff, the professional federations, and with the political authorities.

Denmark

Environmental regulation in Denmark is decentralised. At the **policy level**, the Ministry of

Environment and Energy is responsible for environmental policy and for establishing the legal framework in Acts. The Danish Environmental Protection Agency issues Orders and provides Guidelines on how to implement the Acts at an **operational level**, the counties (16) and the municipalities (275) are the main players and are responsible for issuing licenses, and undertaking inspections and environmental enforcement. The institutional arrangements are summarised in Figure 2.

Figure 2: Institutional arrangements for permitting, inspection and enforcement in Denmark



Source: IMPEL-PEEP Report

Enforcement in Denmark is undertaken by the provinces (counties) and municipalities. In the legislation it is clearly defined which installations fall under whose responsibility. Principally installations which may have an environmental impact on water systems situated in more than one municipality fall under the responsibility of a county. The same principle holds for air emissions. Also, installations that are owned by municipalities are under the responsibility of a county.

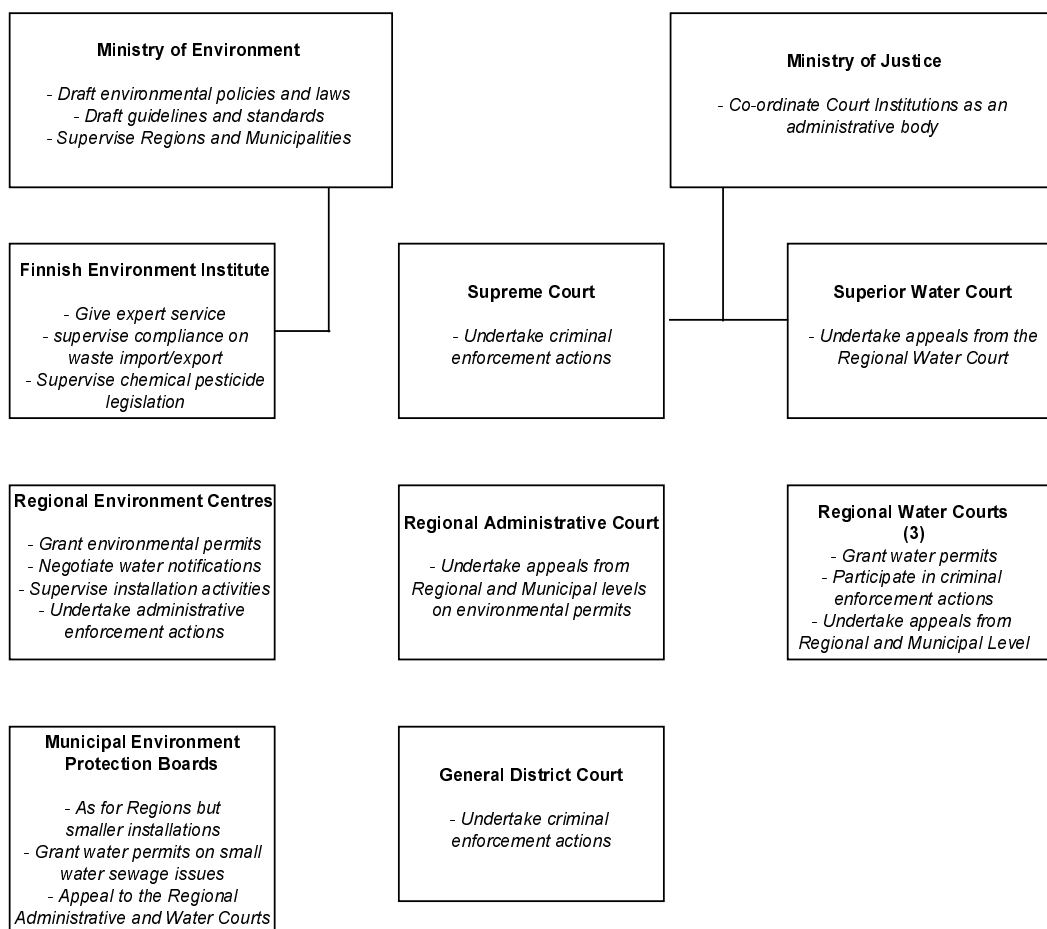
Total compliance checking and enforcement of about one sixth of the installations is done by the counties. The other installations are taken care of by the municipalities. Municipalities and counties are not subordinate to each other, but are the same level of authority.

The state (the Danish Environment Protection Agency) does not have an inspectorate.

Finland

Environmental regulation in Finland is decentralised. At the **policy level**, the Ministry of Environment is responsible for preparing laws and regulations on environmental protection, the development of environmental policy and supervises actions taken by institutions at the local level. The Finnish Environment Institute supervises chemical and pesticide legislation and transboundary movements of waste and monitors potential sources of oil pollution and other sources of environmental damage. At an **operational level**, the Regional Environmental Centres (13) and the Municipal Environment Protection Boards (414) are the main players and are responsible for issuing licences, supervising compliance and environmental enforcement. The institutional arrangements are summarised in Figure 3.

Figure 3: Institutional arrangements for permitting, inspection and enforcement in Finland



Source: IMPEL-PEEP Report

France

In France the organisation for environmental protection is centralised. The people in charge of inspection are civil servants paid by the State. The ministry for spatial planning and environment is in charge of preparation of legislation and ordinance and also promotion of the inspection, including the IMPEL network.

Within the ministry for spatial planning and environment (MATE), the director for the pollution and risk prevention (DPPR) and in particular the industrial environment service (SEI) are in charge of these topics.

At the local level, the Prefect deals with all environmental matters. He is the legal representative of the central government within the department (France is divided into 100 geographical areas named « departments »). The Prefect is under the authority of the Minister. Some services work under the authority of the Prefect for the implementation which includes permitting, inspection and enforcement.

These services are mainly:

- The Regional Direction of Industry, Research and Environment (DRIRE);
- The veterinary section of the Departmental Directorate of Agriculture and Forestry (DSV);
- The Technical Inspection Service for PARIS (STIIC).

The 24 DRIRE deal with the industrial sector and the 100 DSV with the farming and agrofood activities. The Regional Director of Industry, Research and Environment (DRIRE), is responsible, under the authority of the Prefect, for organising the inspection of Classified Installations. There are 1300 inspectors (full time equivalent : 680). For specific and technical support the French Ministry relies on public institutions such as INERIS, IPSN or ADEME.

The aim of the network is multiple:

- Inform inspectors about regulations and techniques,
- Apply regulations in a consistent way,
- Compile the opinions of the inspectors at the time of development of a new regulation,
- Share the experience and use the feedback from the experience for the improvement of regulation and practice of enforcement.

The environmental working group for industry (GTEI) has been created consisting of section heads of the regional authorities for the industry and the STIIC. This working group meets the industrial environment service (SEI) five times a year. the SEI manager is the IMPEL national coordinator. During the meetings the IMPEL actions are explained and the awareness of the inspectors is promoted to enhance participation in IMPEL actions.

A number of days are devoted to particular topics: air pollution (planning, inspection networks), silos, refineries, inspection control on safety management, electrolyses alkaline chlorides, industrial accidents, polluted sites, etc. These meetings are attended by inspectors who are involved with these subjects at a local level. For some sessions, the exchange is extended to the engineers in charge of environmental topics in the factories.

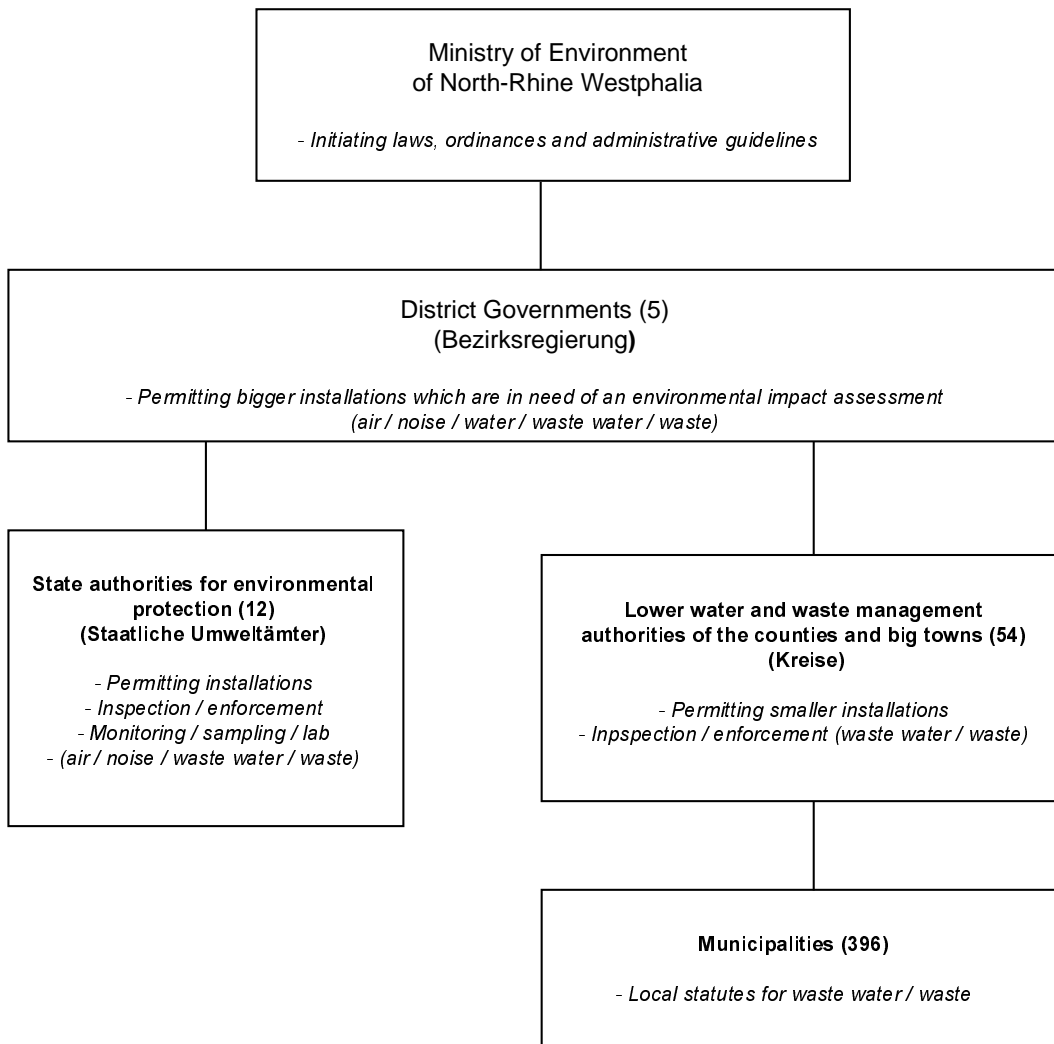
There is a special network for DSV, with a working group that meets three times a year. This veterinary environmental network (REV) consists of 22 regional participants. In addition, all 100 directors of the veterinary services meet once a year.

Germany

The Federal Republic of Germany consists of 16 states known as "Länder".

Within the Reference Book the organisational structure in North Rhine-Westphalia will serve as an example for Germany. The institutional arrangements in North-Rhine Westphalia are summarised in Figure 4.

Figure 4: Organisational structure regarding inspection and enforcement in North Rhine-Westphalia



In Germany administrative structures and responsibilities for compliance checking and enforcement vary between the Länder. Within the Länder there is a Landesregierung at the top level, a Bezirksregierung at the middle level and Kreise and Staatliche Umweltämter at the lower level. The Bezirksregierung is responsible for the quality control of lower governments. The Staatlichen Umweltämter are responsible for compliance checking and enforcement of big, medium and small size installations whereas the Kreise are responsible for the small size installations in the fields of waste and waste water.

Greece

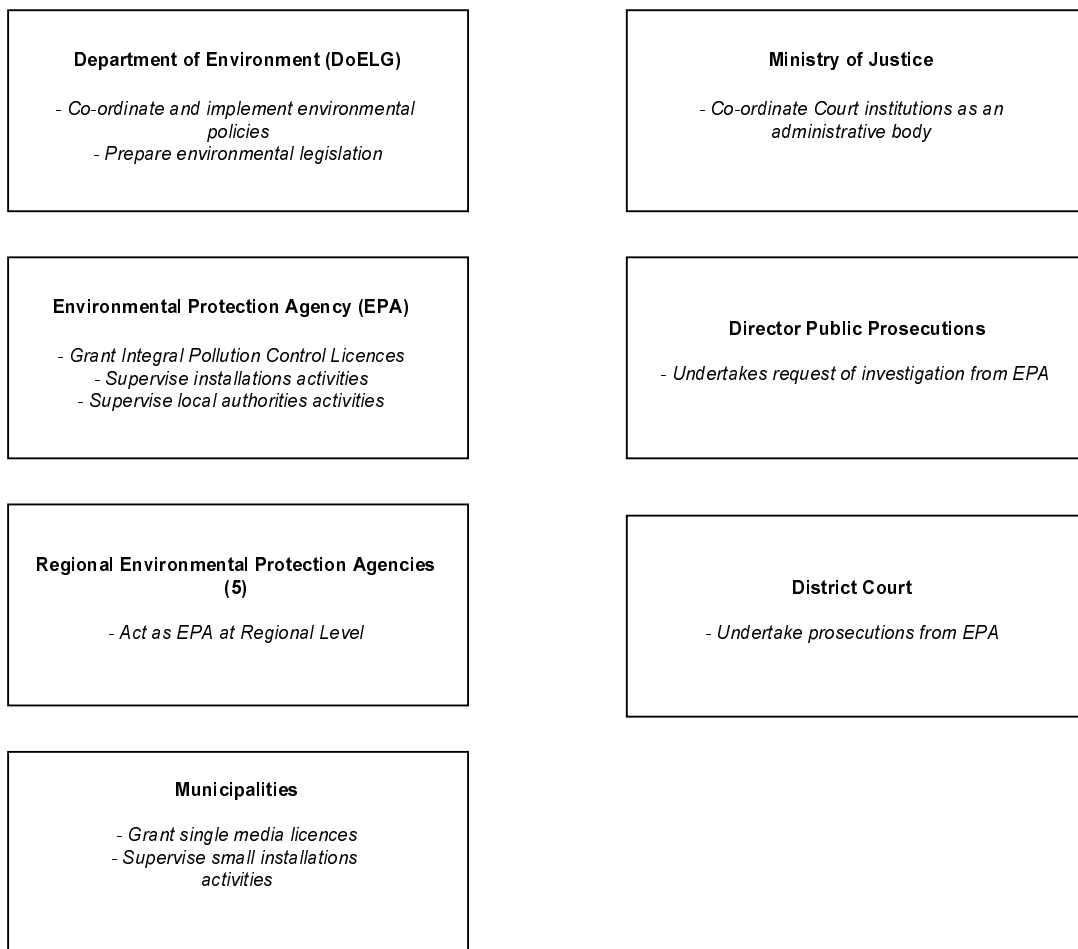
In Greece compliance checking and enforcement is organised at the level of the Departments of Environment, Health and Industry and at the level of Prefectures. Municipalities have a minor task in the control of domestic and commercial waste disposal. Currently (1999) , a new environmental inspection organisation is under consideration.

Ireland

Ireland is a unitary state with centralised structure of Government. The institutions with the responsibility for environmental policy, legislation and environmental licenses are the Department of the Environment, the 114 Local Authorities and the Environmental Protection Agency (EPA). At the central policy level, the Department of Environment is responsible for the co-ordination and implementation of environmental policies together with the preparation and execution of environmental legislation.

The institutional arrangements in Ireland are summarised in Figure 5:

Figure 5: Institutional arrangements for permitting, inspection and enforcement in Ireland



Source: IMPEL-PEEP Report

In Ireland the local authorities issue single media licences to smaller industries involving emissions to air, wastewater discharges and waste disposal. The local authorities are also largely responsible for compliance checking and enforcement. To a limited extent these duties fall to other subsidiary local authorities. At a juridical operational level, the Environmental Protection Agency (EPA) is responsible for licensing and controlling industries listed in the First Schedule to the EPA Act 1992, monitoring environmental quality and supervision of local authorities. Supervision of the local authorities is performed by the five regional inspectorates.

Installations that constitute a potential risk for major accidents are checked by the Occupational Health and Safety Authority.

Italy

Major accident hazard installations are checked by officials from the central or regional government. Compliance checking with respect to air, waste water and waste is partly the responsibility of the Provincial and Local Health authorities.

Luxembourg

The Ministry of Environment is sub-divided into two 'administrations', the Administration of Environment and the Administration of Rivers and Forests. Inspection of classified installations is one task of the Administration of Environment.

The main part of the actual inspection work is done by external experts. The Administration of Environment has a list of accredited external organisations that are licensed to perform inspections. The external inspections are executed under the supervision of the Administration of Environment.

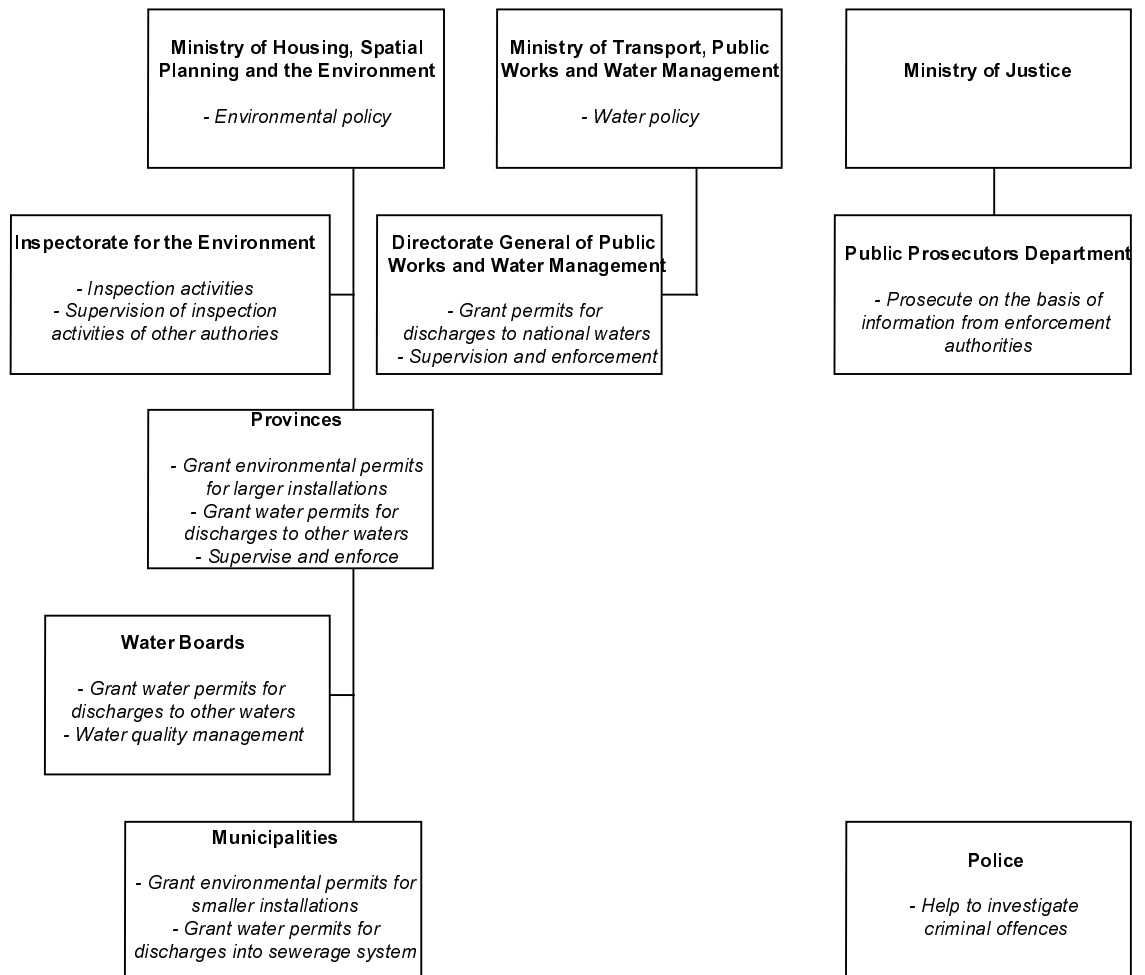
Officials from the Administration of Environment will only perform on site visits occasionally, usually in order to respond to complaints, though sometimes in order to verify the work of the external accredited experts.

The Netherlands

Provinces (12), municipalities (572) and water boards (68) are largely responsible for permitting and compliance checking. However, for certain sectors, e.g. hazardous waste sector, these activities are performed by central organisations like the Inspectorate for the Environment (part of the Ministry of Housing, Spatial Planning and Environment and the Directorate General of Public Works and Water Management (Rijkswaterstaat).

The institutional arrangements in the Netherlands are summarised in Figure 6:

Figure 6: Institutional arrangements for permitting, inspection and enforcement in The Netherlands



Source: IMPEL-PEEP Report

The Inspectorate General carries out a supervisory role over provinces, municipalities and water boards, including first-and second line compliance checking and enforcement actions.

Portugal

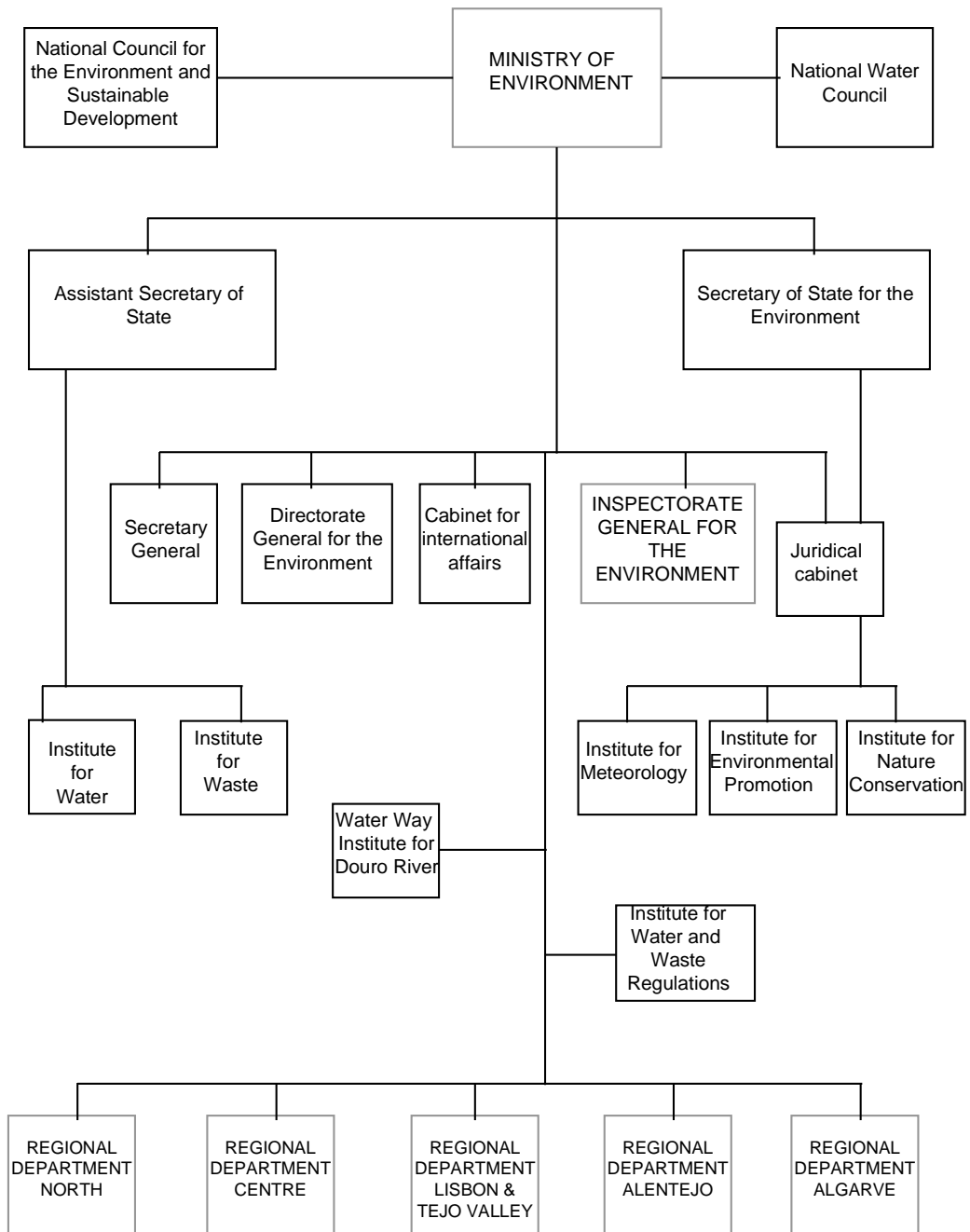
The Inspectorate General for the Environment - IGA - is a new body being installed in the framework of the Ministry for the Environment in Portugal. Its nucleus was transferred from the former Inspection Service and is taking a renewed shape and capability in order to improve the effectiveness for the implementation as well as the enforcement of environmental law. It is assumed that the installation process will be completed in 1999.

The main licence for an industrial installation is issued by the Ministry of Economy, with the part concerning the environment endorsed by the Ministry for Environment. The competent authority for implementation and enforcement of environmental law is IGA, with an integrated approach for inspections dealing with different types of pollution - air , noise , water, solid wastes, and also other aspects related to environmental legislation e. g. industrial safety, critical areas for risk.

The IGA also deals with checking compliance with environmental contract and water supply systems, discharges from municipal wastewater plants and collective industrial wastewater plants and accidents. For all the cases inspections are carried out by unannounced site visits.

Permitting for waste water discharges is a matter for the five regional departments of the Ministry for Environment as well as checking compliance with this licence by suitably trained personnel in drive by visits. The institutional organisation of the Ministry of Environment in Portugal is summarised in Figure 7.

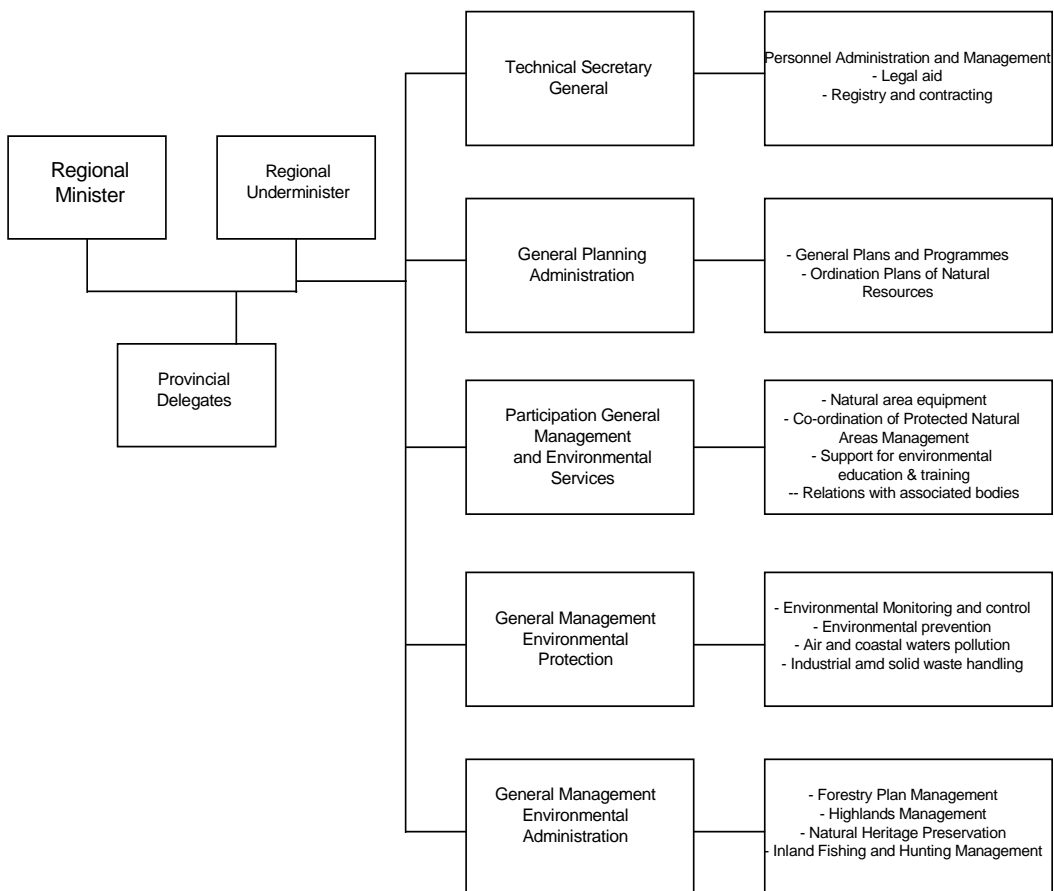
Figure 7: Organisational structure of the Ministry of Environment in Portugal



Spain

The organisation of the inspection system in Spain is largely comparable to the situation in Germany. The inspection system is organised in the individual states at a regional level. There is no national inspecting body. Therefore the situation in Andalusia will serve as an example for Spain. The institutional arrangements in Andalusia are summarised in Figure 8.

Figure 8: Structure of the Regional Environment Ministry of Andalusia (Spain).



Sweden

The supervision of environmentally hazardous activities is divided between the Swedish Environmental Protection Agency (SEPA), the County Administrative Boards (CAB) and the municipal board, i.e. the Environmental- and Public Health Committees (EPHC). Central supervision of compliance with the rules about chemical products and biotechnical organisms is exercised by the National Chemicals Inspectorates within the sphere of manufactures, importers and other suppliers. However, where protection of the natural environment in connection with the handling of chemical products is concerned, the SEPA performs this task.

The SEPA is the central supervisory authority. It co-ordinates the work of supervision. The function of SEPA includes issuing recommendations and providing other guidance for the CAB and EPHC planning. The CAB supervise activities requiring licences under the Environment Protection Act, and the EPHC supervise all other activities under the Act.

United Kingdom

In the UK there are essentially three different systems for the regulation of the environment. This is due to the different legal systems which exist for (1) England and Wales, (2) Scotland and (3) Northern Ireland. The general pattern is however that environmental laws and regulations are made at national level and then implemented by an environmental Agency, which is semi-autonomous. There are three such Agencies; The Environment Agency (England and Wales), The Scottish Environment Protection Agency, and the Environment and Heritage Service (Northern Ireland). In addition to the work of the three agencies, certain other environmental functions are carried out by other bodies (the Department of the Environment, Transport and the Regions, local authorities, water authorities etc.).

The table below summarises the situation in the UK.

| Country | Legislator | | Regulation and Enforcement | |
|--------------------------|--|--|---|--|
| | Legislator | Main Functions | Regulator | Functional Areas |
| England and Wales | Department of the Environment, Transport and the Regions | Generation of legislation, regulations and guidance. | Environment Agency (EA) | Water, Solid Waste, Emissions to air from large-scale industry, Integrated Pollution Control (IPC), Radioactivity |
| | | | Local Authorities | Industrial emissions to air not regulated by the EA |
| | | | Water Companies | Discharges of industrial Effluent to Sewer |
| Scotland | Scottish Executive | Generation of legislation, regulations and guidance. | Scottish Environment Protection Agency (SEPA) | Water, Solid Waste, Industrial emissions to air, Integrated Pollution Control (IPC), Radioactivity |
| | | | Water Authorities | Discharges of Industrial Effluent to Sewer |
| Northern Ireland | Department of the Environment for Northern Ireland | Generation of legislation, regulations and guidance | Environment and Heritage Service (EHS) | Water, Solid Waste, Industrial Emissions to Air, Integrated Pollution Control (IPC) (from March 1998), Radioactivity |

5. INSPECTION

5.1 Introduction

This chapter will contain general information on elements of an inspection. It includes status and priority setting, the preparation of an on-site visit, the on-site visit inspection, other types of inspection than on-site visits and the follow-up. Specific information for inspectors is included in part III of this reference book.

5.2 Status and priority setting

Every time a new piece of legislation comes into force, hundreds, or probably thousands, of installations are subject to it. It is impossible for the inspectorates to continuously check for compliance with every requirement at every facility. Therefore, it is a challenging aspect of compliance and enforcement programmes to develop strategies to make the most effective use of (often limited) resources available to inspectorates.

5.2.1 Status

Each inspectorate will have to allocate a certain amount of time to generating, maintaining and updating an overview of all (potentially) polluting installations in its area. A realistic estimate shows, that a certain percentage of the available time should be allocated to keep up-to-date the existing overviews. These overviews may be generated and updated by:

- consulting registrations of the Chambers of Industry and Commerce;
- consulting the yellow pages / business phone book;
- consulting registrations of the local government (including local tax government), local business organisations (branch organisations) and local environmental organisations;
- driving through the area and making a register;
- complaints by the public (neighbours, groups of citizens or environmental pressure groups);
- company's advising of changes in line with legal requirements e.g. planning law;
- update as natural part of the regulatory process
- statistical data from governmental institutes.

It is advisable to develop an accessible database, that can be easily updated by the inspectors and their staff.

Verification of the data obtained is important and may be carried out by:

- executing a location survey which means a drive by visit to all the firms registered. This drive by visit has the character of a quick scan to verify the registered data against the out-side appearance of the building/premises;
- visiting all the locations and entering the company premises to verify the actual industrial activities against the registered data;
- requesting data from the Chambers of Commerce databases;

- sending a letter to the company, and ask for an overview of activities or an upgrade of the details.

Obviously, when a new piece of legislation comes into force, the above mentioned tools may also be used to generate, update or verify an overview. In any case, it may be that the legislation requires affected installations and organisations to contact the environmental regulator in order to register or obtain a licence.

5.2.2 Priority setting

Inspection activities can be divided into regular or routine inspections and inspections in response to complaints or incidents. The bulk of inspections are typically assigned to the category of routine inspections. From IMPEL-sources it appears, that, on average, routine inspections may take approximately 50-60% of the time of an inspectorate.

Most of the routine inspections are scheduled inspections, since such inspections are essential to the integrity of an enforcement programme. Violators must, of course, know that failure to comply will result in further penalty. Inspections in response to complaints or incidents should take a minor portion of the time of an inspectorate. Priority setting in inspection work should, in principle, not be driven by complaints but rather by a systematic approach.

Priorities depend on the strategy of an inspectorate. Criteria, which may be used include:

- number of inspections identified to be required;
- number of complaints;
- polluting capability or risk caused by an installation;
- emission type (single media inspection);
- recipient type - air, soil, water;
- branch or installation type;
- geographical area ;
- intensity of natural resources used;
- season of the year;
- availability of Environmental (or other) Management System;
- operator self monitoring;
- other inspection programmes, like the co-operation with other inspection programmes of other authorities (national monitoring programmes, programmes on voluntary agreements or other environmental contracts);
- agreements/conventions in the EU or other (inter)national or local governments;
- special (or new) environmental laws;
- information about changes, supplied by the installation;
- environmental performance;
- environmental contracts.

The polluting capability or risk caused by an installation in practice is often an important criterion in setting priorities. In some EU-Member States installations are classified according to the degree of pollution they cause.

The higher the rating, the higher the priority.

The emphasis which an inspectorate wants to put on specific or integrated

inspections are also important for priority setting. Integrated inspections are inspections in which all aspects included in the environmental licence are checked. During a specific or single medium inspection only one of the environmental aspects (for instance the soil) is checked by the inspector. In most EU-Member States, both integrated and specific inspections are carried out.

The frequency of inspection of an installation, naturally, depends on the priority it is given. The resources required for an installation (in terms of person/hours) can be calculated by multiplying the frequency of inspection of the installation by the average time taken for each inspection.

5.3 Preparation of the on-site visit

Whereas the decision on priority is mainly a task of the inspectorates, the preparation of the on-site visit is one of the primary roles of an inspector. The inspector should gather information that can be used to determine compliance with licence conditions, applicable regulations and other requirements.

The first step in the preparation of the on-site visit is a survey of the dossier. On the basis of this information, the inspector determines the most important environmental issues that should be dealt with during the inspection. Those usually include essential environmental information and key regulations contained in the licence. The inspector may thereafter determine the way the inspection will be executed and what its focus will be. This is usually laid down in an Inspection Plan.

The second step is to decide on which inspection tools to use. One of the tools may be a checklist in which the possible points for attention are included. This and other tools, such as co-ordination with other (non)environmental inspectors, or, matching data with those obtained from other databases, are further explained in part III of the Reference Book.

5.4 On-site visit

An on-site visit may include checking of:

- administrative compliance;
- organisational compliance;
- technical compliance.

Key items for a successful on-site visit are the respect and credibility that are created by the inspector. To achieve this an inspector will, apart from having technical knowledge, have to ensure a clear and proper communication about the on-site visit and the related enforcement actions.

Minimum criteria for all on site visits include:

- the visits should be carried out through an integrated approach where possible. If site visits are carried out by more than one inspecting body, co-ordination should be assured;
- every site visit should be recorded and the record should be filed.

A minimum criterion for site visits within a planned compliance checking system is that the visit should cover compliance checking, encouragement and understanding and examination.

A minimum criterion for ad hoc visits in response to complaints, incidents and non-compliances is that they should cover investigation of the complaint, incident or non-compliance.

Once on site, the inspector must comply with any special site requirements especially the site occupier's safety procedures.

All findings should be evaluated and the evaluation should lead to a conclusion regarding further action. Incidents, accidents or non-compliances should be followed up. It is the function of the inspectorate to check that the person who carries out a follow up takes responsibility for making the appropriate investigation and changes in response to an incident.

Whether a routine site inspection is carried out announced or unannounced, depends in most Member States on the history of the site, the size of the installation, its potential environmental impact and the availability and presence of the contact person in the company. Besides, this approach could also be subject to policy decisions of the inspectorate.

5.5 Desk study inspection as an alternative to on-site inspection

In addition to the on-site inspection, the possibility of inspection without a site visit should be considered. Such desk study inspection focuses on examining and evaluation of existing or required data from the installation in question, or self-monitoring data delivered by the installation in accordance to the licence.

The desk study inspection could include following examination and evaluation of existing or required data from an installation:

- Does the existing self-monitoring system cover all important emission aspects?
- Is the existing self-monitoring system sufficient and reliable?
- Does the system ensure - and can it be seen the from the data - that the self-monitoring procedures prescribed in the licence are followed?

Examination and evaluation of self-monitoring data includes:

- Are the results of the self-monitoring in accordance with the terms stipulated in the licence?
- Does the self-monitoring reports from the installation give a clear picture of level of compliance?

5.6 Follow-up

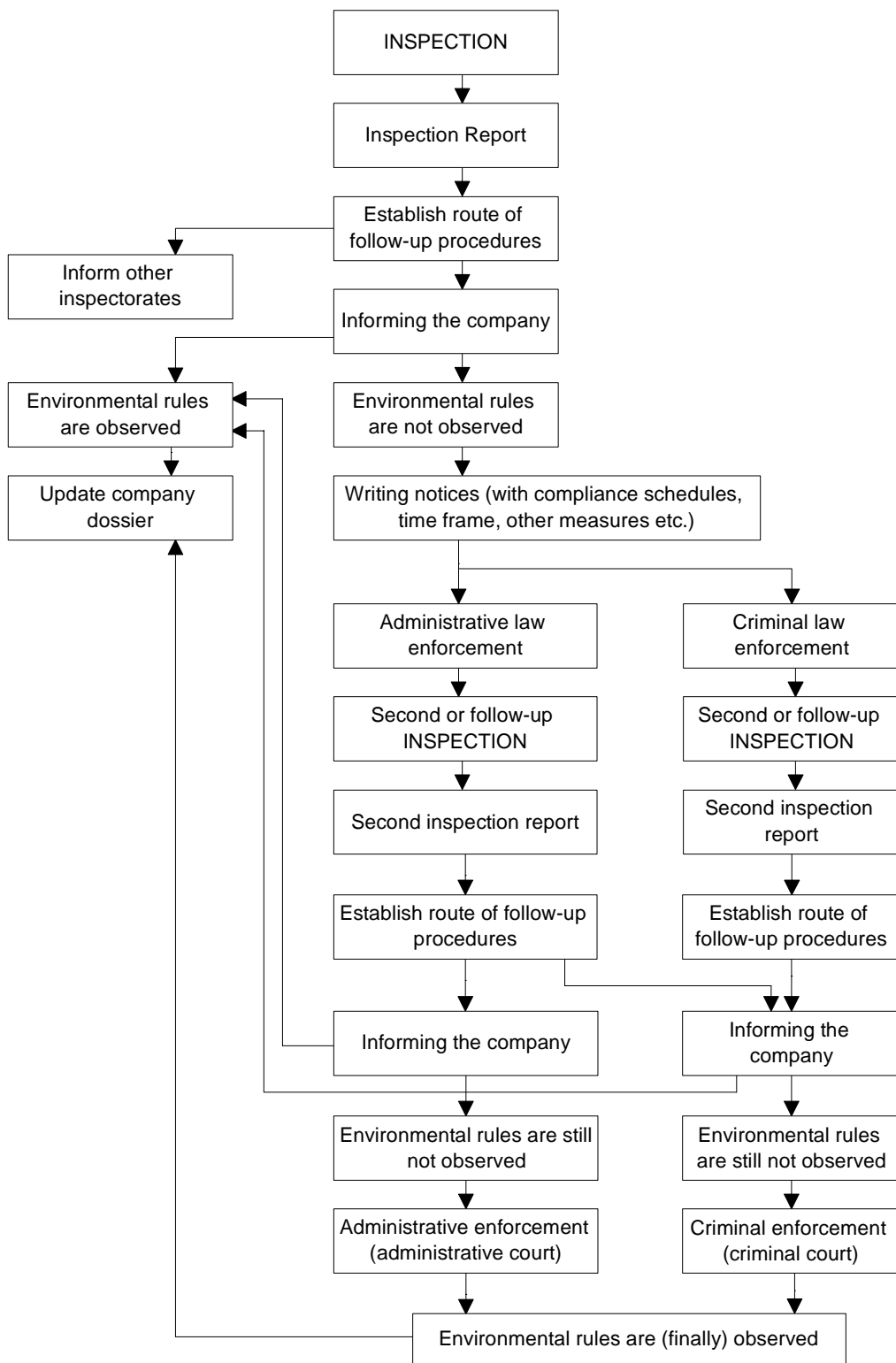
The completion of an on-site visit may be followed by the following actions:

- issuing a letter to the company ;
- informing other inspecting bodies;
- planning a follow-up inspection;
- updating dossiers;
- writing notices;
- criminal or non-criminal follow-up.

In some EU Member States the letter to the company summarises the results from the inspection visit and lists agreements and/or the action the company is expected to take. The next scheduled inspection may (but in most Member States will not) be mentioned. In cases where non-compliance has occurred, a list of potential or anticipated punishments is included. In case of infringements, a warning letter may be issued. The inspection report may be an attachment to the letter.

The major steps in the inspection work are presented by scheme 5.1.

Scheme 5.1: The steps in the inspection follow-up



5.7 Enforcement

Enforcement usually includes:

- inspections to determine the compliance status and to detect violations;
- legal action, where necessary, to compel compliance and to impose some consequence for violating the law or posing a threat to public health or environmental quality.

Sometimes enforcement may also include:

- compliance promotion (by technical assistance, educational programs, subsidies etc.) to encourage voluntary compliance;
- discussions with individuals or facility managers who are out of compliance to develop mutually agreeable schedules and approaches for achieving compliance.

Before enforcement can become effective, a framework for enforcement has to be in place. The first step in creating such a framework is ensuring that environmental requirements in environmental licences are enforceable (see also chapter 1.2.1). Enforceability means that requirements need to be clear, precise, unambiguous and consistent. If this is not the case environmental requirements are difficult or impossible to enforce.

Furthermore an institutional framework (see also chapters 2 and 3) needs to be in place. Without such a framework, it might prove difficult to establish a clear view on the roles and responsibilities of the various governmental bodies involved in the enforcement process. The framework should preferably lay down which government body has the authority to:

- issue regulations, requirements, licences etc. and to guide the implementation process of environmental laws and regulations (ensuring compatibility of environmental legislation with existing laws is part of this);
- inspect installations and the authority to view their records (and confiscate them if necessary);
- take legal actions (under administrative or criminal law) against violators in situations of non-compliance;
- halt and correct situations that pose an immediate risk for the environment and / or public health;

Last but not least the government institutions need to be staffed with sufficient manpower to meet their legal tasks and obligations and should have the credibility necessary to perform their tasks successfully. If the above mentioned criteria are met, effective enforcement can be achieved.

Some country specific examples of enforcement activities are listed below.

Denmark

The Counties and Municipalities are responsible for administrative law enforcement. Serious environmental offences are referred to the police for action under criminal law. The police, in return, often refer cases to the prosecutor who decides on the action to be taken. The following enforcement tools are available.

Administrative and criminal actions

| Administrative Law | Criminal Law |
|---|---|
| Notices Agreement/Recommendations Orders Prohibition notice Self help Informing of criminal/court action | Notices etc. are measures that are not available under criminal law |
| Penalties are not available under administrative law | Penalties Formal infringement: <30,000 DKr Injurious infringement: depends of the severity of the case |
| Imprisonment is not available under administrative law | Imprisonment (up to 2 years) |

Number of administrative enforcement actions, 1992

| | Agreements | Order | Prohibition notice | Criminal action |
|----------------|------------|-------|--------------------|-----------------|
| Municipalities | 1093 | 363 | 26 | 35 |
| Counties | 1170 | 422 | 30 | 81 |
| Total | 2263 | 785 | 56 | 116 |

Finland

The Regional Environmental Centres and the Municipal Environmental Protection Boards have the responsibility for issuing administrative orders in cases where Environmental licence conditions are not met. They may also impose an order requiring an operator to carry out works at the expense of the operator or prohibit an operation if the terms of the administrative orders are not met. Where an operation may result in a risk to health, the Public Health Authority has the powers to prohibit the operation of the installation, unless the installation has an Environmental licence, in which case the powers lie with the Regional Environmental Centres and the Municipal Environmental Protection Boards.

Damages and criminal sanctions for exceeding Environmental licences must be claimed by the authorities in the General District Courts. The Water Courts may impose fines but cannot imprison. However, a prosecutor from the Water Court may take a case to the General District Court which has a right to imprison on conviction.

Administrative and criminal measures

| | Administrative measures | Criminal measures |
|---------------------|---|--|
| Notice | Issue order Levy fines Order work to be completed Prohibit operation | not available |
| Penalties | 11960-299000 Euro 2990000 Euro | Day fines ⁽¹⁾ (max.180 days) Corporate fines ⁽²⁾ : 299,000-29,900,000 Euro |
| Imprisonment | Up to 6 months | Up to 2 years |

2. Day fines means that the total amount to be paid depends on monthly incomes i.e.: if day fine =50 and monthly income is 119,600 Euro, the total fine is 50 times the result of $119600/30$ (days per month), which in this case is 199,331 Euro.
3. Corporate fine means that fines are paid by the institution (e.g. companies) in charge of the operation of the installation that has caused the infringement.

There were no statistics available on administrative and criminal enforcement actions. As an estimate, it can be said that administrative actions for Municipal Environmental Protection Boards, Regional Environmental Centres and Water Courts are 100, 50 and 80 respectively. The majority of cases (over 90%) correspond to penalties.

6. QUALITY MANAGEMENT

6.1 Introduction

In order to operate successfully, inspection bodies should maintain a continuous high quality performance. Quality may be defined as follows:

A body of well-defined instructions, working methods, control mechanisms and performance indicators, that result in pre-defined outputs and quality levels.

In order to ensure and maintain high quality inspection, performance assessment and proper feedback are essential. Assessment can be seen as an important step in the cycle plan-do-check-act, which forms the basic element in quality management systems. Assessment can be either self-assessment or assessment by others.

Obviously, quality management of the inspectorate, or its individual departments, could be based on the methodology of ISO, or, it could even obtain an ISO Certificate. In general and as a first step, a quality office could be set up within the inspectorate. Its function could comprise the management and monitoring of the quality and/or the preparation and implementation of a system according to ISO.

Assessment or auditing of the inspection performance consists of three parts:

1. assessment of the quality of the inspection;
2. assessment of the consistency and quality of the inspection report;
3. assessment of the (performance of) the inspection body.

6.2 Improvement of inspection quality

Each inspector should strive for a continuous improvement of his/her inspection performance and learn from his/her own mistakes. By doing so an inspector also contributes to the continuous improvement of (the performance of) the inspection body.

In order to find ways and means to improve the quality of inspections, regular evaluations are necessary. Evaluations can be made by reviewing the guidelines (which are different in every country) such as:

- feed-back on performance of inspectors;
- role of the inspector in the inspection process; (controlling/enforcing or advising role);
- inspection procedures which are followed;
- efficiency of the on-site visit;
- time needed to carry out an inspection;
- correctness and accuracy of the inspection;

- frequency and timing of the inspections;
- competence of and justification of the persons involved;
- data storage;
- arrangements on follow-up visits.

It will be evident, that many of these items have both qualitative as well as quantitative aspects.

6.3 Inspection report

In order to find out ways and means to improve the consistency and quality of the inspection report the following should be included:

- a check on the completeness of the report. In the inspection report all relevant general and specific information as listed in paragraph 5.2 should be included;
- a check on the consistency and correctness of the report and its conclusions. The reports must be compiled in such a way that the relevant information can be extracted quickly from the report by non-inspecting officials. All the reports must therefore be structured in the same way and according to a uniform layout. For practical examples, see par.12 of Part III.

6.4 Performance of the inspection body

There are two ways of improving (the performance of) the inspecting body.

The first way is tracking the results back by looking for trends and changes in activities or results over time. In this way the *quality of the performance* of the inspecting body is monitored. The local/regional reports can be used to publish a yearly report on the authority's inspection performance. It will then be possible for the government/parliament/ public and as well for the inspectors themselves to find out about inspecting resources (man-year and amount of money) used in previous years for inspection and permitting, number of inspection objects (facilities), numbers of inspections, enforcement actions. In that way they will be able to learn from each other.

The second way involves the setting of targets and comparing the results with the targets afterwards. In this way the *quantity of the performance* of the inspecting body is monitored. Depending on the situation it can be decided to monitor either the quality or quantity of the performance or both.

Indicators for both quality and quantity of the performance of the inspecting body are given below:

| Indicators for quality | Indicators for quantity |
|--|---|
| <ul style="list-style-type: none">- Quality of self-reported data- Environmental improvements within companies- Changing non-compliance rates- Changing character of infringements- Changing number of required enforcement actions- Punctuality of enforcement responses | <ul style="list-style-type: none">- number of inspections- number of fines issued- quantity of self-reported data- changing number of required enforcement actions |

Annual reporting ensures consistent monitoring of results and can be used as a tool in the assessment of the performance of the inspecting body and to identify scope for further improvements. The annual report must therefore review the performance but also identify deficiencies and list required modifications.

7. COMMUNICATION

7.1 Introduction

In some EU Member States inspectors may sometimes be put into a position in which they have to negotiate. In such case the inspector needs negotiation and conflict handling skills. In this chapter tools for inspectors will be discussed. In general, in compliance strategies both enforcement and communication activities are important. Experience has shown that neither one of the two is effective when used alone.

Communication can be used as a tool:

- for improving public relations;
- in public support building;
- for compliance promotion.

Communication activities within an enforcement authority may be laid down in a communication plan.

Finally, communication with other authorities is of equal importance and should not be neglected.

7.2 Negotiation and conflict handling

Negotiation and conflict handling skills may be useful tools for inspectors. In some EU Member States, the inspector can use negotiation as a tool to reach an agreement. However, in several EU Member States negotiation between the inspector and the company concerning the statements in the licence and other regulations is not possible. In fact, negotiation could take place before issuing the licence and may, therefore, not be a task for the inspector.

Negotiation

Industries, which depend on environmental authorities for licenses may consider enforcement bodies to be 'on the other side'. Environmental authorities, which regulate industrial processes may have a similar view of industry. The reason for this is that the two parties have different interests: the authorities have an interest in improving the environment and implementing laws and regulations, whereas the main aim of an industry is to operate its activities as efficiently and economically as possible.

Industry is subject to a wide variety of pressure and incentives for development and change. While environmental regulators may direct and control certain activities or actions in industry, there may be situations in which there is a need to reach a position, which is acceptable to both parties, taking into account various other factors. In such situations, the inspector may be required to negotiate with company representatives in order to achieve the conclusion required by the regulatory authority. In negotiating, a particularly sensitive aspect, which inspectors must be aware of, is the fact that a company may question the details of environmental regulations when compared with those applied to the company's competitors.

Companies have a justifiable desire to be sure that the manner in which they are regulated will not lead to competitive disadvantage.

In setting the scene for negotiations, it is necessary to establish

- a) the contents of the negotiation;
- b) the balance of power;
- c) the climate in which the negotiation will take place.

The inspector can use communication and influencing skills to help determine such factors.

a The contents of the negotiation

By means of arguments, facts, views and conditions an inspector can try to influence the position of the regulated company, taking into account costs and benefits, to reach a result which is most profitable to the environment.

b The balance of power

The inspector may try to strengthen his power. The most successful tactics, which can be used, include:

- proving that one is right by showing facts and expertise;
- persuasion.

Each of the tactics has advantages and disadvantages. In most cases persuasion seems to be the most effective. Persuasion is most effective if one's own views are explained in a clear and structured way and a relaxed but not indifferent attitude is adopted. Also variation in speech, the use of examples, the explanation of main lines supported by facts and visual aids contribute to successful persuasion.

c The climate in which the negotiation will take place

Although influencing the balance of power might be effective, often it is more profitable to create a climate of trust and faith. In all cases an inspector should avoid personally attacking (verbally) the company or its representatives. An inspector should carefully watch the choice of words, show appreciation if possible and use humour where appropriate. Finally, the inspector should strive to be credible and reliable in every aspects of behaviour..

In reaching the conclusion of the negotiation, the inspector must be aware of the absolute baseline position from the point of view of the environmental authority. A clear understanding is essential of what areas are flexible and what areas are fixed. The inspector must ensure that the position of the regulatory body is not compromised.

Conflict handling

It is inevitable that inspectors face conflicts in their work. Conflicts should not simply be seen as unwanted, negative elements, but may present an opportunity for renewal and change.

Conflicts can be approached in different ways, depending on the situation. It should be noted that where possible win-win situations should be aimed at when solving conflicts.

There are several ways to handle conflicts. The most effective ways are:

- co-operation. If an inspector focuses at co-operation he takes both interests into account;
- searching for compromises. If an inspector searches for compromises he is also concerned for the interests of both himself and the other party. She/he is mainly focused on finding suitable, mutual and acceptable solutions.

Each inspector will have his own and preferred style and, in difficult situations, it is this style which will come to the surface. It is an asset if an inspector is able to adapt his style according to the situation.

Each inspector should at least know his own style of conflict handling in order to prevent conflicts from deepening. If an inspector thinks he is not able to solve a conflict he should ask a colleague to assist in order to prevent an impasse. However, an inspector should be part of the solution rather than part of the problem!

7.3 Communication activities related to public relations

Promotional activities by way of provision of information to the public on the activities of enforcement authorities are important tools in making the authorities known to the public. Providing information or publicity on successes may have a positive influence on the 'image' of the authority.

7.4 Communication activities related to public support

Public support is a powerful tool for enforcement authorities because:

- the public may be an ally in promoting compliance if the information is presented in a proper way. For example, public pressure on companies which do not comply with environmental regulations can be a stimulus for the companies to achieve compliance;
- by ensuring public support, the public may function as an outpost of the enforcing authority which reports observed cases of non-compliance;
- public support can help to ensure that environmental (enforcement) issues remain on political agendas and continue to receive the necessary funding.

7.5 Communication as a tool in compliance promotion

Communication can be an effective tool in enforcement. By maintaining good contact with companies about environmental objectives, regulations and compliance during visits and throughout the licensing process, infringements may be prevented.

Preventive enforcement through communication consists of four elements:

- *provision of information*
Providing information on environmental objectives, measures, techniques and environmental management increases the company's knowledge of the issues;
- *understanding each other's role*
Clearly stating the position of the government authorities leads to mutual understanding and improves relations; the company knows what its position is and what is expected of it;
- *persuasion to change behaviour*
Presenting a clear and unequivocal picture of enforcement increases the willingness to change behaviour;
- *deterrence*
Communication about successful enforcement activities can convince notorious violators of the need to become more environmentally conscious.

IMPEL REFERENCE BOOK FOR ENVIRONMENTAL INSPECTION

PART III: Inspection in EU Member States: A practical guide for inspectors

Section 8: Inspection planning

Section 9: Preparation of the on-site visit

Section 10: On-site visit

Section 11: Inspection report

Section 12: Inspection follow-up

8. INSPECTION PLANNING

8.1 Introduction

Inspection planning concerns all activities related to the scheduling, organisation, timing, execution and follow-up of inspection work.

Good planning is the key to success and therefore should be done carefully. In this section the most relevant aspects of inspection planning are presented such as:

- General approach;
- Updating of information;
- Categories of inspection;
- Frequency of inspections.

Finally, this section is completed by an example of *a* checklist for inspection planning. This list can be used as a tool for the compilation of one's own inspection planning checklists.

8.2 General approach

“Inspection is not a courtesy call or making a business deal, it is to compile facts and figures and to make observations. Inspection is a clear mission.”

Before execution of inspection visits, good planning is essential. Sometimes more effort is required for the planning of inspection visits than for the execution of the visits.

Key issues in inspection planning are:

- Setting of clear objectives of what accomplishments are expected from the inspection.
- Familiarity and understanding of the technical aspects, compliance history, the relevant regulations and physical site lay-out.
- Practical preparation of the site visit, including equipment and methods as well as safety aspects.

These and other issues should lead to a proper Inspection Plan (see section 9).

8.3 Updating information

Keeping the information on the companies to be inspected updated is essential for the inspectorate and the inspector.

The following schedule presents criteria for deciding whether or not your information needs an update.

Possible reasons for updating of the information

- Regular visits which are carried out by an inspector. The environmental inspectorates decide on the frequency of visits, by setting priorities.
- The owner of the potential polluting installations provides information about changes in the installations; it's advisable to visit the installations during the building/changing of the installations, so the inspector will be able to advise directly on the environmental aspects. It is often easier and cheaper to realise environmental improvements during the construction phase than afterwards.
- Construction works are finalised and a company starts operating according to a revised licence.
- An environmental accident happened
- As follow-up inspection (check if a non-compliance situation has been repaired)
- After complaints (doesn't matter by whom) or when a situation of non-compliance is suspected.

8.4 Categories of inspection

In general, two main types of inspection can be distinguished:

- integrated inspections
- specific inspections

Integrated inspections are inspections in which all environmental laws and rules including the environmental licence are checked. Specific inspections may concern only a specific topic, such as for example the extent of soil pollution, or the inspection of a specific installation, such as, for example, the effluent treatment plant. Both types of inspections exist in most EU-Member States. It should be noted by the reader, that this Reference Book basically focuses on integral inspections.

There are basically two types of inspection methodologies:

- on-site visit inspection;
- inspection without on-site visits.

In the following some information is given on the practice in a number of Member States.

Austria

In Austria different competent authorities exist for air and noise, water and soil, and waste. Each authority supplies its own permit. Therefore the Austrian inspections are specific, though industrial safety is included. In addition the companies themselves are obliged to arrange periodical inspections (5 or 6 years, depending on the scope of activities). These inspections are integrated inspections.

Denmark

In Denmark all inspections are integral encompassing all media and thereby all recipient types (air, soil, water etc.). The main reason for general inspections is the Danish Environmental Protection Act which is an integral act encompassing all media and emissions: all licenses are integrated licenses.

Ireland

In Ireland integral inspections are usually carried out. The purpose of such inspections is to determine compliance of the company with the IPC licence on a particular day.

Portugal

Both integrated and specific inspections are carried out in Portugal; usually specific inspections are a follow-up action to the integrated inspections.

Sweden

In Sweden the inspections cover an integral approach including all media (water, air, waste, noise, etc.) The operator self monitoring is mandatory and stated by law. The operator reports the results from the self monitoring to the authority.

United Kingdom

In the UK, both integrated and media specific inspections are carried out, according to the type and scale of installation, the relevant pieces of legislation, and the type of licence held.

8.5 Frequency of inspections

General

A distinction must be made between planning aspects that can be influenced by the inspector himself (individual inspection planning) and aspects which are influenced and determined by the inspectorate (overall inspection planning). Inspectorates in most EU Member States have guidelines on a basic frequency of inspections depending on the type of industry and sometimes also specific inspection programmes on specific items exist.

Annex 7 gives an example of three guidance notes that are used by inspectors in the UK. In the guidance note on "Routine Inspections, Planned and Unplanned" useful information is provided on aspects related to inspection planning.

The guideline for frequency of inspections and duration of a visit is based on a number of assumptions. For example, companies which have a greater environmental impact should be inspected more often than those having a smaller impact. Branches of industry in which infringements of environmental legislation occurred in the past should be visited more often.

Inspections of large companies with more complicated processes require more time than inspections of smaller companies with simple processes.

Inspection time includes:

- the preparation of the site visits;
- the site visit;
- the processing of the findings;
- the follow-up actions.

In the following, some considerations are given that could be taken into account when determining the frequency of inspections.

United Kingdom

In the United Kingdom a guideline exists for the inspections related to IPC processes. The guideline indicates that such inspections should preferably be done at least 4 times per year.

Establishing the baseline

Competent authorities in the EU member states should set baseline frequencies for each category of installation. To establish such a baseline programme the following requirements should be taken into account (IMPEL, Minimum Criteria for Inspections):

- installations covered by the Council Directive 96/61/EC of 24 Sep.1996 concerning Integrated Pollution Prevention and Control (IPPC-Directive);
- installations covered by Council Directive 82/501/EEC of 24 June 1982 on the control of major-accident hazards of certain industrial activities (Seveso-Directive) or the Council EU Directive 96/82/EC on the Control of Major Accident Hazards (Seveso II);
- installations to be inspected according to national/regional requirement priorities.

Determining Frequencies

Competent authorities should develop an assessment and scoring system to determine inspection frequencies, by adjusting the baseline frequency for each installation with regard to its specific circumstances. Competent authorities should establish criteria by which each installation can be assessed. Proposed criteria are shown below, but competent authorities may adjust these according to the circumstances (from IMPEL, Minimum Criteria for Inspections (1997) and Frequency of Inspections, 1999)

Criteria influencing Frequency

Criteria for assessing the frequency of inspections may include:

- relevant pollutants similar to IPPC-installations (e.g. production of particle boards and fibre boards), where the relevant impact on pollution is due to:
 - * the potential danger (toxicity, explosion, etc.) of used substances;
 - * the amount of mass flow of substances emitted.
- installations older than a certain number of years (e.g. 15 years)
- where past experiences have raised concern about the operation of the installation (for example, previous poor performance of the operator or where there has been a large number of complaints).

- where poor management of an installation has resulted in pollution incidents.

- local situation
 - * residential areas
First priority is the protection of human beings in residential areas, recreation areas, hospitals and sanatoriums.

 - * protection areas
There are interactions with water protection areas, nature reserve and nature conservation areas, protected biotopes etc.

 - * polluted areas
All information about residual pollution areas, so called burdens of the past, redevelopment areas especially where there has been mining industry and so on are needed.

 - * density of installations, density of emissions
The inspector has to consider the agglomeration of industry, the intensification of agriculture especially livestock breeding, all the problems with traffic related to the operation etc.

- ‘Plan for inspection’ covering the contents, the scope and a defined period (e.g. annually).
 - * subsequent orders or administrative fines in the past;
 - * number, specific knowledge and equipment of staff;
 - * participation in self-monitoring systems;
 - * relevant participation in EMAS with regard to inspection;
 - * results of monitoring the state of the environment (water quality, air quality, etc.);
 - * change of operator;
 - * polluting potential of the process;
 - * deterioration in the operational performance of the process;
 - * frequency of public complaints or expressions of public concern;
 - * the authorised process having a minimal polluting potential;
 - * operational performance of the process to demonstrably high standards.

Obviously, inspection, and in particular the site visits, requires much time and effort. Resources are therefore carefully used. Below examples are given of how several Member States apply minimum criteria for frequency of inspection.

Denmark

The Danish State set the following overall minimum criteria for inspection:

- 50% of licensed activities should be inspected annually;
- 50% of activities obliged to notify before operation or regulated by a specific branch statutory order should be inspected during the previous 2 years (=25% annually);
- 50% of animal farms should be inspected during the previous 3 years (= approximately 16% annually), except pig farms with a capacity for storage of manure between 9-12 months capacity which should be inspected during the previous 3 years (=33% annually).

These are minimum frequencies (and should not be regarded as “good inspection practice”). If an authority - e.g. a municipality - inspects less frequently than the above-mentioned minimum frequencies, the State (the DEPA) will intervene.

See Scheme A on the next pages.

Finland

An overview of the number of installations requiring a permit, the number of permits issued and the time spent on the issuing of permits is provided in Scheme B on the next pages.

Greece

In Greece a systematic analysis is made of the inspection work. All major criteria for inspection are applied to the different industrial sectors. On the basis of the inspection data, resources for inspections, frequencies, duration etc. are determined. An example is given in Scheme C on the next pages.

Luxembourg

The licence prescribes regular checks, which have to be fulfilled by external accredited experts. For air emissions, the frequency is normally every year for the bigger installations (like glass-, steel- and cement works) and every three years for smaller installations.

Spain

Frequencies of inspections depend on the media involved (water, air, soil etc.), the type of industry etc. Also regional differences exist. However, a general range between 1 and 12 times a year can be adhered to. Fluctuations outside this range will hardly occur.

Scheme A: **Denmark:** Statistics on inspection, 1996

| Authorities responsible for licensing, inspection and Enforcement | No. of industrial sites requiring a licence | No. of industrial sites not requiring a licence | Man-years spent on inspection and permitting | No. of sites visited | No. of visits |
|---|---|---|--|----------------------|---------------|
| Counties | 2,729 | 1,136 | 212 | 2,242 | appr. 4,500 |
| Municipalities | 4,201 | 25,898 | 256 | 11,329 | 16,323 |
| Total | 6,930 | 27,034 | 468 | 13,571 | appr. 21,000 |

Source: Danish EPA's annual report "Miljøtilsyn 1996", based on 1996-reports from all counties (14) and municipalities (275).

Note: Inspection figures concerning farms and smaller installations are not included in the scheme shown.

Scheme B: Finland: number of installations requiring licence, number of licences issued and time spent on issuing of licences

| Organisation responsible for regulation/ enforcement | No. of installations requiring licenses ⁽¹⁾ | No. of licenses issued per year ⁽¹⁾ | Man-years spent issuing licenses per year ⁽¹⁾ |
|--|--|--|--|
| Regional Environment Centres | 2000 1200 ⁽²⁾ | 250 | 75 |
| Municipal Environment Protection Boards | 25000 | 2500 | 150 |
| Water Court | ⁽³⁾ | 200 | 25 |
| Total | 28200 | 2950 | 250 |

Source: Ministry of Environment

Notes:

1. Figures shown in the table are only estimates as there were no specific data.
2. Opinions for water notifications to according to the Water Protection Decree.
3. No information available.

Scheme C: **Greece**: example of inspection data analysis.

| Code No. | Industrial sector | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
|----------|------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------|---------------------------------|------------------------|----------------------------|--------------------------------|-------------------------|-------------------------|----------------------------------|----------------------------------|
| | | Percent of units in Cat. A | Percent of units in Cat. B | Percent of units in Cat. B | No. of installations for inspect. | Average inspection return (yrs) | No. of inspect. Per yr | Est. Insp. Duration (days) | Estimated insp. Time (days/yr) | Percent inspection by C | Percent inspection by M | Estimated inspection days/yr - C | Estimated inspection days/yr - M |
| | | ("1) | ("1) | ("1) | ("2) | ("3) | C4/5 | ("4) | C6xC7 | ("5) | ("5) | C8xC9 | C8xC10 |
| 1 | Extractive industry | 94% | 4% | 82% | 921 | 3.8 | 242 | 1.4 | 331 | 5% | 95% | 17 | 314 |
| 20 | Food processing | 19% | 11% | 3% | 1,108 | 2.2 | 512 | 1.2 | 592 | 100% | 0% | 592 | 0 |
| 21 | Drink production (incl. Alcoholic) | 20% | 6% | 7% | 185 | 3.5 | 53 | 1.1 | 60 | 100% | 0% | 60 | 0 |
| 22 | Tobacco sector | 0% | 99% | 0% | 0 | 5.0 | 0 | 0.0 | 0 | 0% | 0% | 0 | 0 |
| 23 | Textile production | 6% | 25% | 3% | 151 | 1.7 | 87 | 1.4 | 125 | 100% | 0% | 125 | 0 |
| 24 | Clothing production | 0% | 4% | 0% | 0 | 5.0 | 0 | 0.0 | 0 | 0% | 0% | 0 | 0 |
| 25 | Wood production | 0% | 20% | 0% | 19 | 3.5 | 6 | 1.0 | 6 | 100% | 0% | 6 | 0 |
| 26 | Furniture production | 0% | 17% | 0% | 0 | 5.0 | 0 | 0.0 | 0 | 0% | 0% | 0 | 0 |
| 27 | Paper products | 9% | 29% | 7% | 33 | 2.0 | 17 | 1.7 | 29 | 100% | 0% | 29 | 0 |
| 28 | Publishing sector | 0% | 16% | 0% | 0 | 5.0 | 0 | 0.0 | 0 | 0% | 0% | 0 | 0 |
| 29 | Leather & fur production | 6% | 1% | 2% | 113 | 1.0 | 113 | 1.6 | 176 | 100% | 0% | 176 | 0 |
| 30 | Plastic & rubber production | 34% | 0% | 14% | 461 | 2.0 | 230 | 1.1 | 265 | 100% | 0% | 265 | 0 |
| 31 | Chemical industry | 42% | 5% | 21% | 268 | 1.4 | 193 | 2.1 | 405 | 100% | 0% | 405 | 0 |
| 32 | Fuel processing | 76% | 11% | 57% | 103 | 1.0 | 103 | 3.2 | 328 | 100% | 0% | 328 | 0 |
| 33 | Mineral processing | 9% | 37% | 5% | 284 | 2.4 | 116 | 1.4 | 166 | 100% | 0% | 166 | 0 |
| 34 | Metallurgy | 74% | 0% | 56% | 55 | 1.0 | 55 | 3.2 | 175 | 100% | 0% | 175 | 0 |
| 35 | Metal products | 1% | 13% | 0% | 75 | 2.7 | 27 | 1.1 | 31 | 0% | 100% | 0 | 31 |
| 36 | Mechanical products | 14% | 23% | 3% | 234 | 5.0 | 47 | 1.1 | 51 | 0% | 100% | 0 | 51 |
| 37 | Electr. Machine production | 0% | 17% | 0% | 6 | 1.0 | 6 | 1.1 | 6 | 100% | 0% | 6 | 0 |
| 38 | Transp. Means production | 3% | 3% | 1% | 221 | 1.2 | 186 | 2.9 | 533 | 98% | 2% | 522 | 11 |
| 39 | Other industry | 0% | 6% | 0% | 0 | 5.0 | 0 | 0.0 | 0 | 0% | 0% | 0 | 0 |

EU Network for the Implementation and Enforcement of Environmental Law
 IMPEL Reference Book for Environmental Inspection

| Code No. | Industrial sector | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 |
|----------|-------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------|---------------------------------|------------------------|----------------------------|--------------------------------|-------------------------|-------------------------|----------------------------------|----------------------------------|
| | | Percent of units in Cat. A | Percent of units in Cat. B | Percent of units in Cat. B | No. of installations for inspect. | Average inspection return (yrs) | No. of inspect. Per yr | Est. Insp. Duration (days) | Estimated insp. Time (days/yr) | Percent inspection by C | Percent inspection by M | Estimated inspection days/yr - C | Estimated inspection days/yr - M |
| | | ("1) | ("1) | ("1) | ("2) | ("3) | C4/5 | ("4) | C6xC7 | ("5) | ("5) | C8xC9 | C8xC10 |
| | | | | | | | | | | | | | |
| 41 | Electricity, Gas & Steam Generation | 96% | 0% | 95% | 361 | 1.0 | 361 | 3.3 | 1,190 | 100% | 0% | 1,190 | 0 |
| | TOTALS | | | | 4,599 | 1.95 | 2,353 | 1.90 | 4,470 | | | 4,062 | 408 |

Cat.A: first priority category according to Greek legislation

Cat.B: second category according to Greek legislation

C: on the basis of complaint

M: on basis of monitoring

8.6 Checklist

It is within the scope of this Reference book to provide practical tools for inspection work. On the following pages a Checklist for Inspection Planning is presented. It contains many relevant issues on inspection planning and presents them in the form of questions. List A is designed for use by the inspector himself, while list B is a practical tool for the inspection agency in general.

INSPECTION PLANNING A: Checklist for the inspector

Did you check the completeness of the dossier on the installation?

0 If so, check:

- ◇ Licence of the facility and details of the application procedure, including operator self monitoring programme, EMAS etc and reports from the operator to the authority
- ◇ Up to date information about BATNEEC / IPPC / etc.
- ◇ New regulations that are of importance to the facility
- ◇ Technical drawings of the facility
- ◇ Map of the facility premises
- ◇ Descriptions of eventual new processes, expansions, modifications etc. in the facility that have been subjected to recent change (this should have resulted in issuing a revised licence)
- ◇ Diagrams of the processes in the facility
- ◇ Reports, letters, notifications etc. from previous inspections
- ◇ Notices sent to the facility (depending on the character of the on-site visit (announced versus unannounced))
- ◇ Seasonal influences that are of importance for the outcome of the visit
- ◇ Essential environmental facts
- ◇ Incidents which have taken place in the past
- ◇ Earlier infringements
- ◇ Aspects of the facility's operations which have not been thoroughly investigated and approved during a previous inspection
- ◇ Notifications of environmental incidents
- ◇ Research reports or environmental reports

Did you co-ordinate your activities with other (non environmental) inspectors

0 If so, by

- ◇ Deciding whether the inspection will have an integrated or a single media character
- ◇ Contacting the regional and local officers (in Government service) to find out which facilities in their juridical area they will inspect in the near future. Ask them to send a list of those facilities
- ◇ Sending those lists to the officers of other boards (e.g. the water quality board) to find out which facilities have an adequate licence
- ◇ Trying to find out whether some facilities will be visited by more inspectors within short notice. Try to plan the on-site visit together with them
- ◇ Contacting the police-officer(s) in charge of environmental affairs and the public prosecutor to know about complaints of the public, former prosecutions, sentences, reports etc.
- ◇ Having meetings with the above-mentioned inspectors
- ◇ You are accompanied by a colleague (in case of a serious incident). This in order to collect corroborated legal evidence (if necessary) and to question a person simultaneously

Which of the listed inspection tools are needed for the site visit?

- ◇ Checklists (either site-specific or branch specific)
- ◇ Information to hand out, e.g. about the inspectorate and the Ministry of Environment etc.
- ◇ Information on the regulations on the items of inspection
- ◇ Background information (addresses of other inspectors or of companies to inspect oil tanks etc.)
- ◇ Laptop computer
- ◇ Inquiry forms
- ◇ The licence of the facility and details of the application procedure
- ◇ Technical drawings of the premises and the plant
- ◇ Process diagrams
- ◇ Reports and letters, etc. from previous inspections
- ◇ Notices sent to the factory
- ◇ Equipment to take samples of the soil, air-emissions noise-emissions etc.
- ◇ Identity card
- ◇ Warrant card
- ◇ Mobile phone (permission might be needed to take the phone during certain parts of the visit)
- ◇ Photo camera
- ◇ Personal protection equipment:
 - ◇ safety glasses
 - ◇ safety shoes/boots
 - ◇ special clothing
 - ◇ safety gloves
 - ◇ safety helmet
 - ◇ overall
 - ◇ ear protection
 - ◇ face protection

INSPECTION PLANNING B: Checklist for the inspectorate

Do you have an overview of all industrial activities?

If so, it was compiled by information collected....

- ◇ from the register of the Chambers of Industry and Commerce
- ◇ from the yellow pages / business phone book
- ◇ from the register of the local government, local business organisations and local environmental organisations
- ◇ by driving through the area and making a street up - street down registration.

Is the information verified?

If so, the date of the last update is noted and the following of the listed methods were used

- ◇ a location survey (drive by visit to all the companies registered)
- ◇ visiting (actually entering the facility premises) all facilities to match the industrial activities against the registered data
- ◇ sending a letter to the facility, in which an overview of the present activities or an upgrade of the details is requested

Is an update required of the available information?

If so, because

- ◇ the owner of the potential polluting facility provided information about changes in processes or equipment
- ◇ revision works were completed and a facility starts operating according to a revised licence
- ◇ an (environmental) accident happened
- ◇ complaints were received or a situation of non compliance is suspected
- ◇ a regular visit was carried out by an inspector
- ◇ a follow up visit is required

Were priorities for inspection set?

If so, by using the following criteria

- ◇ polluting capability or risk
- ◇ emission type (single media inspection)
- ◇ recipient type - air, soil, water
- ◇ branch or installation type
- ◇ geographical area
- ◇ number of complaints
- ◇ natural resources consuming criteria
- ◇ season of the year
- ◇ availability of Environmental Management System in relation to quality and/or health and safety management system

- ◇ other inspection programmes, agreements / conventions: EC / international / local government, branch, special environmental laws, special subjects (air, soil, water, energy, waste, risks)

- ◇ notifications by the polluter
- ◇ former non-compliance
- ◇ specific / integral
- ◇ inspection themes

9. PREPARATION OF ON-SITE VISIT

9.1 Preparation of the inspection visit

A key to successful on-site visits is the awareness of the inspector about the situation, the activities and processes, the history and other aspects of the site to be visited. An inspector who is well informed about the company will be a credible partner for the company's management and will thus be respected by his counterparts. The degree of preparation for an inspection depends on the type of inspection (integrated or specific) and the size, scale and complexity of the installation.

In general, much information about the site or company is available, be it publicly, or in the files of the inspectorate. Studying the dossier will reveal much useful background information.

Furthermore, consultation of technical handbooks on the specific activities and/or production processes of the company to be visited is generally very useful.

This dossier may contain the following items:

- licence of the company and details of the application procedure;
- management organisation schedule of the company & responsibility list;
- technical drawings and site lay-out drawing the plant;
- process diagrams;
- reports and letters, etc. from previous inspections;
- notices sent to the factory;
- essential environmental facts;
- new plants;
- incidents which have taken place;
- new regulations;
- earlier infringements;
- aspects of the company's operations which have not been thoroughly investigated and approved during a previous inspection;
- notifications of environmental incidents;
- research reports or environmental reports.

On the basis of this information, the inspector determines the most important environmental issues in the context of the company and the inspection. Those usually include essential environmental information and key regulations contained in the licence. The inspector can then determine the way the inspection is executed and what its focus will be.

Discussions with colleagues and senior managers will also be very useful in the context of the preparation of the on-site visit

9.2 Development of the Inspection Plan

The key element in the preparation of the on-site visit is the compilation of the *Inspection Plan*. The Inspection Plan should be based on in-depth knowledge of the available dossier of the installation(s) to be inspected.

The development of a sound inspection plan prior to going on-site is as important to the total compliance monitoring and enforcement process as the generation of a high-quality, well-documented inspection report. Its basic purpose is to provide the inspector or inspection team with a step-by-step guide to compiling relevant evidence about a facility's procedures and practices that have been included in the scope of the inspection.

The inspection plan serves several purposes:

- States the reason for inspection: a brief history of why the inspection is taking place and the inspection objectives (i.e., what is to be accomplished).
- Records the scope of the inspection: identifies the functional areas, assessment topics, and level of inspection.
- Specifies inspection procedures and associated rationales: which field and analytic techniques will be used to collect what information; what record-keeping systems will be reviewed; which personnel will be interviewed; which samples will be collected; and for each step, why.
- Permits clear definition of team task assignments, objectives and time scheduling.
- Details resource requirements (costs) based upon planned activities and time allocations.
- Provides clear guidance for what kinds of evidence should be collected and documented.
- As the inspection plan may include a Quality Assurance Project Plan (only if the inspectorate is certified according to ISO-standards), it should then include a set of well-defined targets for the objectives to be met and the method for controlling if these objectives have indeed been met.
- Identifies a safety contingency plan, where required. This is particularly relevant in case inspection takes place upon the occurrence of an accident.

The investment of time required to produce a quality inspection plan is worth the effort because it constitutes a "walk-through" that should save time and resources during the actual inspection. The inspector must assess precisely what questions are appropriate to address in a short planning document.

It is important to be clear as to which elements will be the focus of the inspection. For short inspections of small sites, however, a detailed inspection plan may not be necessary or appropriate.

9.3 The elements of the Inspection Plan

While the length and complexity of the plan will vary, the inspection plan should include at least the following elements:

- objectives/background history of the inspection;
- scope and assessment topics;
- inspection activities and field techniques;
- sampling planning;
- safety plan;
- administrative requirements.

To provide a practical tool for the development of one's own Inspection Plan, the following list may serve as a guide. It summarises the main elements of a good Inspection Plan.

OBJECTIVES

- What is the purpose of the inspection?
- What is to be accomplished?

TASKS

- What records, files, licences, regulations will be checked?
- What co-ordination with laboratories, other State or local authorities is required?
- What information must be collected?
- What samples will be taken and/or tests will be conducted?

PROCEDURES

- Announced or unannounced inspection?
- What specific facility processes will be inspected?
- What procedure will be used?
- Will the inspection require special procedures?
- Has a Quality Assurance Plan been developed and understood?
- What equipment will be required?
- What are responsibilities of each member of the team?
- How will the reporting be organised?

RESOURCES

- What personnel will be required?
- What equipment will be required?
- Has a safety plan been developed and understood?

SCHEDULE

- What will be the time requirements and order of inspection activities?
- What will be milestones? What is essential/what is optional?
- Is any follow-up to be anticipated?

9.4 Inspection tools

Checklists/points of attention

As an expedient for the site visit, a regular checklist can be used. In this checklist the possible points of attention are mentioned; for environmental items specific to the site, the licence can be used. The checklist is a tool to assist the inspection process.

In any case, the checklist should make clear the items and/or situations which require attention and which may require enforcement action.

Site-specific checklists are not always advantageous, unless an inspection specific checklist has been made. Remember, every site (company/business) is subject to changes. This means that after a certain period of time, each checklist will become out-dated. Preparing a site specific checklist also bears the risk of ignoring subjects which are not included in the list.

Drawing up general branch specific checklists is considered to be more useful.

Such branch specific lists can help an inspector to keep track of all the different relevant environmental aspects of a certain branch of industry.

However, it must be kept in mind that checklists are just a tool and cannot replace the critical mind of an experienced inspector.

Example: Iron foundries are potential air polluters. However, if a certain foundry uses electrical ovens, air pollution is not a priority issue. Environmental aspects are always dependent on the specific circumstances on site or at the company.

The Danes use for registering the MIS (Miljø (= environmental) Information System) which automatically prints specific checklists.

Other Inspection tools

Besides checklists and the company dossier there are other inspection tools which the inspector can/must use during the site visit.

These include:

- information to hand out, e.g. about the inspectorate and the Ministry of Environment etc.;
- information on the regulations on the items of inspection;
- background information (addresses of other inspectors or of companies to inspect oil tanks etc.);
- writing material/laptop computer;
- inquiry forms;
- parts of the company dossier:
 - * the licence of the company and details of the application procedure;
 - * technical drawings of the premises and the plant;
 - * process diagrams;
 - * reports and letters, etc. from previous inspections;
 - * notices sent to the factory;
- equipment to take samples of the soil, air-emissions, noise-emissions etc.;
- identity card;
- mobile phone where appropriate (although in some cases permission may be required to bring it to the site);
- warrant card;
- photo/video camera (generally it should be requested to bring cameras to the site);
- personal protection equipment:
 - * safety glasses;
 - * safety shoes/boots;
 - * special clothing;
 - * safety gloves;
 - * safety helmet;
 - * overalls;
 - * ear protection;
 - * face protection.

Some of the mentioned inspection tools will be used during the first visit, while others might be necessary during a next visit.

10. ON-SITE VISIT

10.1 Introduction

Generally, during the on-site visit, the inspector verifies whether his observations in the field are consistent with the material he collected during the preparation. It is important to be critical about the materials that are provided to the inspector. Assumptions should always be verified. Be alert, curious and prepared to get “dirty hands”. Finally, also organoleptic impressions are also very important; smell, sounds etc. may provide useful information. A physical inspection is the most important aspect of an on-site visit.

In this section the main issues related to the on-site visit are presented. These include:

- general set-up of the visit;
- access to the site;
- compliance checking;
- announced or unannounced visits?
- visits in response to pollution incidents;
- completion of the site visit;
- other.

Finally, a checklist for on-site visits is presented.

10.2 Start of the on-site visit

The preparatory phase of the inspection activities is followed by the actual on site visit. This section deals with the different aspects of on site visits. It provides practical information about general procedures for an inspection and modifications according to the local situation.

“Inspection is not a courtesy call or making a business deal: it is to compile facts and figures and to make observations. An inspection has a clear mission.”

The purpose of an on site visit is to determine compliance with licence conditions. This is achieved through an inspection of the following items:

- the plant, the processes and the emissions;
- environmental equipment (including its maintenance);
- measurements, administration and log books.

If necessary, samples are taken and measurements are carried out.

A key item for a successful on site visit is the respect and credibility that is created by the inspecting official by having appropriate knowledge and skills.

To achieve this an inspector will have to ensure a clear and proper communication about the on-site visit and the related enforcement actions. To cover the various items related to on-site visits an inspector could be trained in:

- communication aspects;
- inquiry and negotiation techniques;
- conflict handling.

Minimum criteria for *all on-site visits* include:

- the visits should be carried out through an integrated approach. If site visits are carried out by more than one inspectorate, co-ordination should be ensured;
- every site visit should be recorded and the record filed.

A minimum criterion for *site visits within a planned compliance checking system* is that the visit should cover compliance checking, encouragement and understanding and examination.

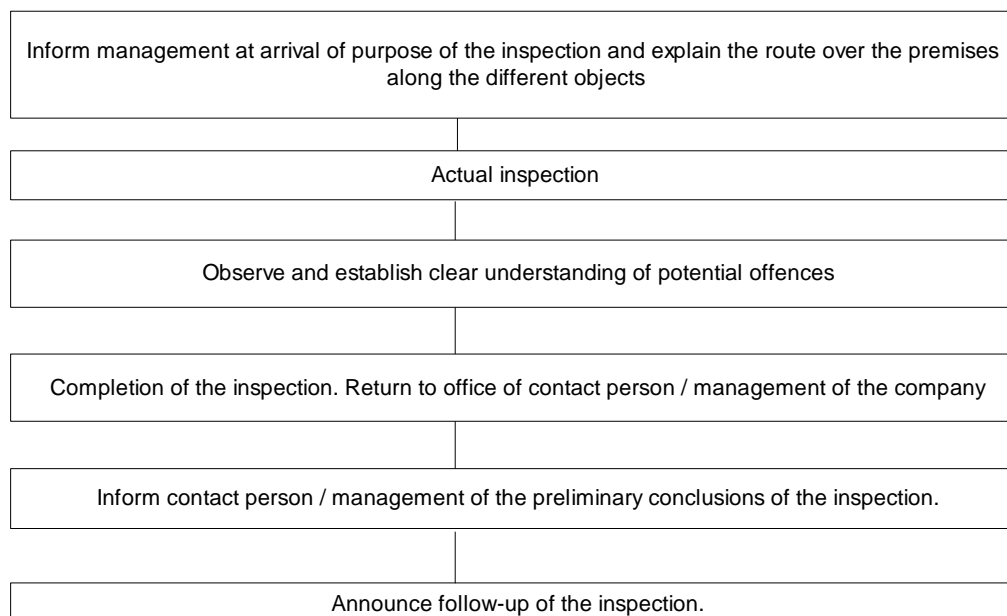
A minimum criterion for *ad hoc visits in response to complaints, incidents and non-compliances* is that the visit should cover the investigation of complaints and the investigation of significant incidents and accidents and non-compliances.

Once on site, the inspector must comply with any special site requirements especially the site occupier's safety procedures.

All findings should be evaluated and the evaluation should lead to a conclusion regarding further action. Incidents, accidents or non-compliances should be followed up. It is the function of the inspecting body to check that the person who carries out a follow up takes responsibility for making the appropriate investigation and changes in response to an incident.

On-site visits consist of the actual execution of the on-site visit, provisional conclusions and completion of the on-site visit, as explained in scheme 10.1. The paperwork of the preparation phase has been completed before entering the stage of the on-site visit.

Scheme 10.1: Execution of on-site visits



10.3 Presence of the inspector on site

Once on site, the inspector has to ensure the site responsible person is informed of his visit and of its purpose. In certain cases, however, the inspector may immediately start his inspection work, even without involving the responsible person. In the UK there are Guidance Notes for the use of the enforcing authority and inspectors. One of them is about Routine Inspections, Planned and Unplanned and is included in Annex 7.

If the responsible person is contacted, then the procedure described below could be adhered to.

1. Ask for the responsible person and write down his name. In most cases this person is known from previous visits or from previous correspondence with the company.
2. Explain the purpose and procedure of the inspection.
3. During the site inspection, the inspector shall take whatever samples are necessary, and inspect and record details from any gauges and meters to determine compliance with requirements.
4. Also inspected should be site organisation and working practices to identify any of non-compliance or pollution risk (e.g. storage of chemical drums close to drains).
5. Any problems or faults found on site during the inspection should be reported to the site contact prior to the inspector leaving the site if possible.
6. In the same way, required action, together with time scales should be reported to the site contact.
7. Where appropriate and possible, advice regarding improvements, precautionary measures and legislation should be given.
8. If required, site self-monitoring records should be checked and discussed.

9. If available the site-specific checklist should be completed and where necessary, signed by the site contact prior to departure.
10. Inform contact person/management on preliminary conclusions of the inspection.
11. Announce follow-up of the inspection

10.4 Compliance checking

In most EU Member States the inspector has the powers to inspect any aspect of the prescribed installation. Although not exhaustive the following list illustrates the main areas of inspection:

- the operating plant
- abatement systems and the associated control and alarm systems
- control room
- alarm testing log books
- drain systems
- sample points and sampling equipment, both liquid and gaseous
- storage areas
- analytical laboratory; testing and calibration procedures
- compliance monitoring results log books
- abnormal incident reporting log book
- public complaints log book
- process operation procedures

In most Member States there is hardly any difference in compliance checking for companies that have a traditional licence and companies that have implemented an Environmental Management System. In some countries however, the compliance checking is different. The frequency of the site inspections might be influenced by the presence of an EMS.

A Licence

In most cases the enforcement officer establishes whether the company is in possession of a complete licence. For this, he observes whether any new installation has been put into use since the last inspection and has not yet been registered in the licence. The officer furthermore checks whether the factory operates according to the description in the licence:

- Are the environmental provisions, which are set out in the licence present?
- Are these provisions well maintained (see logbooks etc.)?
- Does the staff follow the instructions included in the licence?
- Are the logbooks and administrative records (stated in the licence) up to date?
- Have the required periodic tests been carried out, and what were the results?

In addition, the enforcement officer may take samples, for example of discharged waste water, waste materials or of the soil. In most cases the results of the analyses of the samples will be considered as indicative measurements because exact measurements are only allowed to be taken by specialists (certified experts) according to detailed procedures. In some Member States however the inspectors are empowered to take all the samples.

Measurements of, for example, the noise level or of emissions, might also be conducted at some factories to check whether the company complies with the relevant standards (standards are set in the licence or in orders for non-listed activities). These measurements are normally done by specialised enforcement officers or by other specialists (analysis is typically left to an outstanding (*should this be "outside?"*) laboratory).

The inspector must be prepared and/or have information about direct action that needs to be taken. An inspector must be informed about the situations he/she might encounter during the site visit.

Finally, depending on the type of licence, part of the inspection visit will consist of administration and log-book checking.

- In pro-active companies the company may have a type of licence which allows for administrative checking of, for example, the auditing reports that have been issued.
- In companies with a defensive attitude towards implementing environmental measures/provisions the type of licence may make a site visit with a less administrative character necessary.

B Operator Self Monitoring and Reporting

Self monitoring must be scrutinised to examine and evaluate the system including for example the following checking:

- Does the existing self monitoring system cover all important emission aspects?
- Is the existing self monitoring system sufficient and reliable?
- Does the system ensure - and can it be seen from the data - that the self monitoring procedures prescribed in the licence are followed?
- Are the results from the operator self monitoring adequately reported to the authority?
- Are the results of the self monitoring in accordance with the terms stipulated in the licence?
- Does the self-monitoring reports from the installation give a clear picture of level of compliance?

C Environmental Management Systems (EMS)

Companies that have an Environmental Management System (EMS) will in some cases be easier to inspect. This licence mainly contains target regulations. Such target regulations offers the company flexibility in its choice of means to achieve environmental improvements.

More information on EMS is given in annex 3 of part IV.

Although the company still has the obligation to comply with the regulations in the licence, the enforcement system may be different. The main principles of the changed enforcement system are the following:

- Skilled and educated inspectors are necessary;
- the essentials for the environment as laid down in the licence form the principal points for the inspection;
- administrative assessment of the company's environmental performance (emissions, measures, research) take place on the basis of (external) audits;
- with a properly functioning EMS, site inspections by the authorities may need to be done less frequently but will nevertheless remain necessary. The inspections will be performed as efficiently as possible, which means for instance that it must be clear what information is required and what information is to be provided at certain times, including a specific assessment of this information.

In principle, the enforcing authorities will continue to inspect on the basis of conditions in the licence. However the inspections will take place at a more administrative level. Deviations from the desired situation will still be reported to the company, which is expected to respond adequately. In this respect, the enforcing authorities make it clear that compliance with the licence is the company's responsibility. If necessary, repressive action will be taken.

In summary, even if a company has a certified EMS, this does not automatically mean that the environmental performance of the company is good. It only means that the company takes its environmental responsibilities seriously. The company can be rewarded by a decreased number of inspections. However there might still be reason enough to inspect. Of course, companies which violate against environmental regulations can lose their certificate.

10.5 Announced or unannounced inspections?

Both announced and unannounced inspections have clear advantages. Announcement will allow the operator and inspector the opportunity to discuss informally the scope of the inspection and other points. The advantage of an unannounced inspection is that the installation can be seen unadorned.

Whether a routine site inspection is announced or unannounced, in most Member States depends on the type and size of installation, the purpose of the inspection, the occurrence of complaints or incidents, and the history of the occurrence of complaints or incidents, the history of the installation.

In the case of an announced visit the licence-holder should be requested to collect all the relevant environmental information of his business/factory, and the keys to relevant buildings a few days before the actual visit. Documentation should include the checking/maintenance reports of the technical installations done by third parties. This will be time-saving and prevent the necessity of multiple visits to obtain the relevant information.

Denmark

The Danish procedures to be followed during planning and organising the visit can be found in DEPA's guidelines for inspection. These guidelines contain recommendations on good inspection practice, including the idea of announcing the first site visit and agreeing it with the person responsible for the facility. This makes sure the responsible person will be present during the visit. This first visit can also be used to ensure a responsible contact for future unannounced inspections (following visits should be unannounced unless there are reasons for announcing the visit).

Portugal

In Portugal the policy is that all visits are unannounced.

United Kingdom

In the United Kingdom in general routine visits which are conducted for the purpose of monitoring performance or compliance will be unannounced, while meetings to discuss progress and major site audits will be pre-arranged.

10.6 Visits in response to incidents

Visits are made when incidents have occurred or there are abnormalities at a site. Inspector may become aware of an incident:

- during the course of a routine inspection;
- by notification of an accident by a site operator, by a member of the public or by a colleague.

First, the extent and character of the incident should be determined as quickly as possible. In the case of serious or extended incidents, involvement of and co-ordination with fire brigades, emergency services etc. should take place. In this case, public emergency scenarios may occur. The inspector should be aware that issues of safety and the work of the emergency services might take precedence over his/her own environmental concerns and issues.

In case of more limited or local incidents, the following procedure may be followed:

1. ask for the responsible person. In most cases this person is known from previous visits or from previous correspondence with the company;
2. explain the purpose;
3. the inspector should question the site contact and other site operators/staff as necessary to establish the exact details of on site-operations and potential problems which have resulted in the incident. Also, the company's fire brigade and/or Environment, Health and Safety department may be involved;
4. if the incident is more serious, the inspector should (in some EU Member States this is obligatory) be accompanied by a colleague in order that corroborated legal evidence may be collected if necessary and the person being questioned should be given the caution of the possibility that any information given may be used in evidence;

United Kingdom/Scotland

In Scotland the person being questioned "is not obliged to say anything, but anything said will be taken down in writing and may be given in evidence".

5. all relevant areas of the process site and the neighbouring area of the site should be inspected unless the incident has resulted in conditions which are unsafe; the inspector must follow the site safety requirements.;
6. the contact should be given the opportunity to accompany the inspector on the inspection (in some large process sites etc. the inspector should not enter the site unless accompanied by a site representative);
7. where appropriate, samples of discharges etc. should be taken and if necessary should be taken as legal samples in accordance with the legal procedures (which differ from country to country) for use as evidence;

8. the inspector should write down all statements made by the contact person and if appropriate take photographs or video recordings as information or as evidence;
9. where appropriate, information and advice should be given to the site operator regarding action which may stop an ongoing incident, prevent a recurrence, or remedy damage caused. In some circumstances the inspector may strongly recommend or insist that certain action is taken to stop an incident and/or prevent further pollution;
10. before leaving the site the inspector should ensure that the site contact/management is aware of any further action which is required on their part, and that the inspector's course of further action is clear.

For follow-up of the visit in response to the incident, it is important to assess the response of the company to the instructions and guidance of the inspector.

10.7 Completion of the site visit

The completion of the on-site visit, or the closing meeting, forms an important moment in the inspection process. The management of the company that was inspected will be curious to know the outcome of the inspection. They may even be anxious to influence the outcome or the opinion of the inspector. In order to obtain a proper completion of the on-site visit, the following guidelines might be applied:

- organise a short meeting with the responsible persons of the company;
- make a written record of the names and titles of facility officials and other personnel who were interviewed;
- review and make a written record of the documents and other information that was handed over by the company;
- summarise the activities that were done by the inspectors(s);
- explain the procedures of the inspection follow-up;
- be friendly and open, but refuse to make any statement that might be interpreted as a formal statement by the Inspectorate. Refer to the documents and correspondence that will be provided to the company after completion of the inspection.

The results of the site visit are recorded in an official inspection report (see section 12) and if necessary an official report to be sent to the prosecutor.

The report can vary from a point by point indication of whether a regulation in the licence is met, to a full report including all the steps taken.

The preliminary results should be discussed with the management, either during the inspection or at a later date, and form the basis for the follow up activities or for repressive enforcement actions. In a few cases, the infringements may be so serious that rectifying measures have to be taken immediately.

10.8 Other issues

This paragraph touches on a few remaining issues that may be of value for the daily work of the inspector, in particular his on-site visit.

Interviewing

Interviews are a highly valuable, but often under-used means of gathering information during an inspection. Oral and written statements obtained from facility personnel may be admissible evidence in some EU Member States (provided that the statements have been made after a caution has been given). An inspector with good interviewing skills can elicit information and develop important facts that might otherwise be missed.

Denmark

In Denmark the role of the inspector is only to secure the evidence. Questioning etc. is done by the police.

While written materials cannot replace practical experience for learning and improving interviewing skills, the techniques presented in this section can help shorten the training time needed to become a successful interviewer. Many of these techniques are designed to ease the tension and anxiety that plant managers and employees may experience at the thought of being interviewed by an inspector.

Other techniques are designed to aid inspectors in composing questions that will more effectively elicit useful information.

Important aspects in relation to interviewing are furthermore:

- statement of evidence;
- procedures for how to prepare a written statement;
- planning and conducting interviews, questioning techniques;
- creating an atmosphere conducive to a productive interview.

The inspector's logbook

The inspector's logbook or field notes document what the inspector saw, heard, smelled or touched. Field notes serve as evidence to corroborate other forms of evidence, such as physical samples or photographs. They serve as the foundation for preparing inspection reports and refreshing the inspector's memory about inspection prior to giving testimony. They may be subject to discovery and disclosed to the opposing side and may be entered as evidence in a trial.

Since they may be disclosed to the opposing side in an enforcement case, field notes must contain just the facts. Even if the inspector believes the inspected facility is clearly in violation that conclusion must be omitted. Instead, all the observed conditions that led the inspector to that belief should be meticulously recorded in the notes.

Field notes may be taken either in written form in a field logbook or in spoken form on an audio recording device, such as a portable tape recorder or dictating machine.

The inspector's Field logbook is the core of all inspection documentation. It should contain accurate and inclusive documentation of all inspection activities.

The logbook is used as the basis for preparing the inspection report and to refresh the inspector's memory regarding the specifics of samples collection and other inspection procedures should the inspector be called upon to testify.

Language in the logbook should be objective, factual, free of personal feeling and conclusions of law. The logbook can be provided to the opposing side during the discovery process of an enforcement case and can be entered as evidence in court.

Important issues of which should be kept a record in the logbook, are:

- Documents;
- Unusual Conditions and Problems;
- Interview Notes;
- General Information;
- Other Incidents;
- Administrative Data.

Sampling procedures

Sampling can be an important element in the collection of evidence. Actually, it is of particular importance if transgression of the license is suspected. However, keep in mind, that sampling is a science! Sampling techniques, location of the sampling, duration, accuracy and frequency, may be subject to serious discussions. Therefore, detailed guidelines on sampling are not given by this Reference Book. Execution of sampling may best be done by an independent company or organisation. In some EU Member States sampling and analysis must be done by companies and/or laboratories provided with an accreditation.

However, for the inspector, a few questions are of importance, such as:

- What is the general approach for sampling? In any case: apply systematic sampling!
- Is the company applying self-monitoring?
- Do I need to take samples? What is the purpose of the sampling?
- Will the envisaged sampling provide sufficient evidence?

Luxembourg

Samples will be taken by officials of the Administration of Environment or the external accredited experts.

Portugal

The inspector is responsible for all the procedures for sampling during the on site visit and is also responsible for testifying in court when there is a failure to pay the administrative fine and process result in a court case. Analytical results, if samples are taken according to the specific law used, are an important tool in court.

Photographs & videos

The enforcement of environmental law is dependent upon the effectiveness of inspectors as information-gatherers. Increasingly, photography has played an important role in that process. Photographs provide inspectors not only with visual documentation contributing to more accurate inspection reports, but also with evidence for enforcement proceeding and objective descriptions of conditions found at a facility.

Photographs are some of the best physical evidence, and easiest to authenticate and therefore admit into evidence in court. The rest is simply that the inspector has to say that any given photograph does “fairly and accurately represent” what the inspector saw on the date in question at the site in question.

When enlarged and placed in view in the courtroom, photographs can be the best means of duplicating what occurred months or years earlier during an inspection. Clear photos of relevant subjects, taken in proper light and at proper lens settings, provide an objective record of conditions at the time of the inspection. In this respect, photographs can be the most accurate demonstration of the inspector’s observations.

Photographs can also be helpful to the field team during future inspections, informal meetings, and hearings. In case a Polaroid-system is used, take always 2 pictures of the same subject and the same moment. You may hand one copy to the company. In case you use a digital camera, make a copy of the picture-files and leave it to the company. Use a camera that registers automatically date and time of the picture.

ON-SITE VISIT: Checklist for the inspector

Did you decide what character the inspection will have (integrated versus single medium)?

- ◇ an integrated inspection will be executed
- ◇ a single medium (air, water, solid wastes etc.) inspection will be executed
- ◇ a specific target inspection (boiler house, furnaces, measuring equipment etc.)
- ◇ IPPC- or Seveso Directive inspection

In case of a single medium inspection, which of the following media are you going to inspect?

- ◇ water
- ◇ soil
- ◇ air
- ◇ waste
- ◇ noise
- ◇ hazardous waste
- ◇ radiation

Which of the following aspects will be included in your inspection?

- ◇ the environmental media
- ◇ the plant, the processes and the emissions
- ◇ the environmental equipment
- ◇ the administration and the log books
- ◇ IPPC-and Seveso Directive aspects

Is the visit part of a planned compliance checking system?

- 0 If also, make sure that the visit covers compliance checking, encouragement, understanding and examination

Is the visit a routine site inspection?

- 0 If so, make sure that
 - ◇ the responsible contact at the location is notified
 - ◇ the purpose and the procedure of the inspection is explained

Did you ensure that the licence of the facility is matched against the actual situation?

- 0 If so, check the following
 - ◇ environmental provisions are present in the licence
 - ◇ the provisions are well maintained
 - ◇ the provisions are properly used
 - ◇ the staff follows the instructions included in the licence
 - ◇ the log books and administrative records (stated in the licence) are up to date
 - ◇ is there compliance with the provisions of the license
 - ◇ the required periodic tests have been carried out, and the results are.....

Are you taking samples and do you carry out measurements?

- 0 If so, which samples were taken
 - ◇ discharged waste water

- ◇ soil
- ◇ air
- ◇ waste materials
- ◇ other media / substances
- ◇ emissions
- ◇ noise
- ◇ radiation

Are you familiar with the options that are available for immediate action?

0 If so, which of the following options was used

- ◇ shut down (parts of) the process
- ◇ sealing of (parts of) the process or specific equipment
- ◇ other

Does the facility have an Environmental Management System?

0 If so, check the following

- ◇ the supervision is executed according to the environmental essentials as laid down in the licence
- ◇ the environmental performance of the facility is assessed by means of external audits
- ◇ a physical inspection is carried out apart from administrative compliance checking

Did you ensure that the operator is in compliance with the self-monitoring programme?

0 yes

Did you co-operate with other authorities involved?

0 If so, which of the following authorities:

- ◇
- ◇

Is the inspection a response to a pollution incident?

0 If so, make sure that

- ◇ the visit is co-ordinated with the emergency services
- ◇ the facility's responsible person is present
- ◇ the purpose of the visit is explained
- ◇ the site contact and other site operators / staff are questioned in order to establish the exact details of on site-operations and potential problems which might have resulted in the incident
- ◇ you are accompanied by a colleague (in case of a serious incident). This in order to collect corroborated legal evidence (if necessary) and to question a person simultaneously
- ◇ all relevant areas of the process site are inspected. This must be the case unless the inspector must follow the site safety requirements

- ◇ the contact person is given the opportunity to accompany the inspector on the inspection (in some large process sites etc. the inspector should not enter the site unless accompanied by a site representative)

- ◇ appropriate samples of discharges etc. are taken (if necessary as legal samples in accordance with the legal procedures) for use as evidence
- ◇ all statements made by the contact person are written down
- ◇ appropriate photographs or video recordings are made as information or as evidence
- ◇ information and advice is given to the site operator (if appropriate) regarding action which may stop an ongoing incident, prevent a recurrence, or remedy damage caused
(In some circumstances the inspector may strongly recommend or insist that certain action is taken to stop an incident and / or prevent further pollution).
- ◇ the site contact/management is aware of any further action required on their part, and of further action, before leaving the site

Which of the following information is included in your provisional conclusions?

- ◇ the facility on new developments
- ◇ appointments
- ◇ time schedules

Which of the listed items should be available at completion of the on site visit?

- ◇ a summary of inspection results including a list of infringements and non-compliance items, as well as a list of positive observations / improvements
- ◇ a summary of required actions and measures, including time limits to improve the situation. (It is essential that the facility gains insight in the legal consequences of its environmental behaviour and possible follow-up actions).
- ◇ a list with the consequences of repeated non-compliance in case of a follow-up inspection (e.g. proposed fines).(It is essential that the facility gains insight in the legal consequences of its environmental behaviour and possible follow-up actions).
- ◇ additional information on possibilities to implement cleaner technology / waste minimising techniques / precautionary activities and / or the provision of information on self-monitoring possibilities and related items?
- ◇ the official inspection report. (The report can vary from a point by point indication whether a regulation in the licence is met, to a full report including all the steps taken).

11. INSPECTION REPORT

11.1 General

The results of all work done by an inspector are finally expressed in some form of written report. Proper documentation of an inspection is a key aspect of an inspector's job.

The *purpose of the inspection report* is to present a factual record of an inspection, from the time when the need for the inspection is perceived through the analysis of samples and other data collected during the inspection.

The objective of an inspection report is to organise and co-ordinate all evidence gathered in an inspection in a comprehensive, useable manner. To meet this objective, information in an inspection report must be:

- Accurate. All information must be factual and based on sound inspection practices. Enforcement personnel must be able to depend on the accuracy of all information.
- Relevant. Information in an inspection report should be pertinent to the subject of the report.
- Comprehensive. The subject of the report should be substantiated by as much factual, relevant information as is feasible. The more comprehensive the evidence, the better and easier the prosecution task.
- Co-ordinated. All information pertinent to the subject should be organised into a complete package. Documentary support (photographs, statements, sample documentation, etc.) accompanying the report should be clearly referenced so that anyone reading the report will get a complete, clear overview of the subject.
- Objective. Information should be objective and factual; the report should not draw conclusions.
- Clear. The information in the report should be presented in a clear, well-organised manner.
- Neat and Legible. Adequate time should be taken to allow the preparation of a neat, legible report.

11.2 Conclusions regarding compliance

Inspection reports should contain only the facts about the inspection. The report to the inspection management should be *objective* and *complete*. Clearly, however, the inspector's conclusions about the compliance of the facility are the critical factors in the decision as to whether a violation did or did not exist. It is essential, however, that the inspection report itself includes the inspector's conclusions regarding non-compliance.

When the inspection report is sent to the company, the personal opinion of the inspector must be omitted. Although the inspector may communicate to the company his view on certain matters, *facts and figures* should not be mixed with *personal opinions*!

If the inspector has concluded that there has been non-compliance, this information should be mentioned in the report sent to the company.

All inspection reports should preferably be read and discussed by more qualified officials.

Denmark

In case of non-compliance, inspectors may send warnings and official warning and:

- prohibit continued operation and, where, required, order the removal of the activity;
- order the responsible party to restore the original situation;
- have ordered measures taken at the expense of the responsible party, after expiration of the specified time limit.

Police may initiate legal action in response to reports from officials of provinces and municipalities. Fines and imprisonment may be imposed by court.

Luxembourg

In case of non-compliance the Minister of environment will issue a written warning.

If the illegal situation will not be redressed within a certain time frame, the installations which are responsible of the illegal situation can be closed.

The owner of the installation has 10 days to object against the closure of the installation.

Parallel to the administrative sanctions, there are penal sanctions. In this case, the official of the Administration of Environment will send a report with his observations on the illegal situation to the public prosecutor. The court will decide on the penal sanctions.

Portugal

In Portugal the inspection report is completed during or after the on-site visit has taken place and signed by both the inspector and a representative of the company. The Portuguese inspection report is included in Annex 8.

11.3 Example of inspection report outline

The extent and contents of the inspection report will depend on the question whether the inspection concerned an integrated or a specific inspection. Although the specific information items will vary, the following outline for an inspection report can be adapted to most situations. The inspector may make selective use of the format presented.

Introduction

- General information
 - * purpose of the inspection
 - * facts of the inspection (i.e. date, time, location, name of the agent-in-charge, etc.)
 - * participants in the inspection

- Summary of Findings
 - * brief summary of the inspection findings
 - * names and titles of facility officials interviewed

- History of Facility
 - * status of the facility
 - * size of the organisation
 - * related firms, subsidiaries, branches, etc.
 - * type of operations performed at the facility under inspection

Inspection Activities

- Opening Meeting
 - * procedures used at arrival, including presentation of credentials and written Notice of Inspection (the latter only if required)
 - * special problems or observations if there was reluctance on the part of facility officials to give consent, or if consent was withdrawn or denied
 - * topics discussed during the opening meeting; what is the inspector's objective?

- Records
 - * types of records reviewed
 - * any inadequacies in record-keeping procedures, or if any required information was unavailable or incomplete
 - * note if record-keeping requirements were being met

- Evidence Collection
 - * statements taken during the inspection
 - * photographs taken during the inspection
 - * drawings, maps, charts, or other documents made or taken during the inspection

- Physical Samples
 - * purpose for which samples were obtained
 - * exact location from which they were obtained
 - * sampling techniques used
 - * physical aspects of the sample
 - * custody procedures used in sample handling
 - * results of laboratory analysis

- Closing Meeting
 - * receipts for samples and documents given to facility officials
 - * procedures taken to confirm claims of confidentiality
 - * recommendations made to facility officials

Attachments

- List of Attachments
 - * list of all documents, analytical results, photographs, and other supporting information attached to the report
- Documents
 - * copies of all documents and other evidence collected during the inspection. All documents should be clearly identified.
- Analytical Results
 - * sample data and quality assurance data

11.4 Checklist and example of an inspection report

On the following page a checklist for the compilation of the inspection report is presented.

Examples of inspection reports from Ireland and Portugal (*?Scotland, not Portugal*) are presented on the following pages. The reader should be aware that these reports are only meant for illustrative purposes.

Ireland

It should be noted that in Ireland the expression “audit” is used for inspection.

INSPECTION REPORT: Checklist for the inspector

Is the following general information incorporated in the inspection report?

- ◇ name and location of the facility
- ◇ responsible person / contact point within the facility
- ◇ date of on site visit
- ◇ number of the visit
- ◇ dates of previous inspections
- ◇ internal registration number (licence number)
- ◇ inspecting body responsible for the on site visit
- ◇ names of inspecting officials
- ◇ reason for inspection

Are the following general guidelines implemented during the compilation of the inspection report?

- ◇ the inspection report is easy to read and written in a consistent manner
- ◇ the report makes clear to the reader what actions the inspected facility is expected to take
- ◇ the inspection report makes clear what enforcement action will be taken by the inspection body
- ◇ the inspection report available to the facility
- ◇ the report is written in accordance with other model reports
- ◇ the report is accurately registered (preferably by means of EDP (Electronic Data Processing)) within the inspection body

Is the following specific information incorporated in the inspection report?

- ◇ a review of the historical context, meaning listing of persisting and new cases of non-compliance, previous fines paid by the facility, attitude (pro-active, active, re-active, defensive) of the facility concerning environmental regulations
- ◇ a description of the inspected items during the on site visit
- ◇ the documentation used by the administrative inspection
- ◇ minutes of the interviews with facility personnel
- ◇ extensive description of previous non compliance issues
- ◇ other inspection observations
- ◇ the results of the analysed samples
- ◇ description of previous enforcement actions of local/regional authority
- ◇ time limits, concerning the achievement of compliance with environmental regulations, at previous infringements.
- ◇ decisions to impose sanctions (if necessary) and a description of the measures taken (fine, closing of the facility etc.)
- ◇ follow-up inspections
- ◇ non-conflictuous items which should be adjusted



IPC LICENCE AUDIT REPORT

| | | | |
|-------------------|--------------------------------------|------------------|--------------------------------|
| Licensee: | Company Ltd | Visit No: | 3 |
| Register Number: | 10 | Date of Audit: | 31 th December 1999 |
| Location: | Example County Co. | Scheduled: | Unannounced audit |
| Person Contacted: | Mr. I.N. Dusty | Previous Audits: | December '95, December '96 |
| Position: | Safety, Health & Environment Manager | Audit Criteria: | IPC Licence Register No. 10 |
| Lead Auditor | Mr. L. Auditor | Inspector: | Mr. I.N. Spector |

The audit was unannounced. The audit team arrived on-site at 9.00a.m, presented themselves to security and asked to see the Environment Manager. The Agency personnel introduced themselves and informed the company that they were on site to carry out an audit of the facility to assess compliance with the IPC licence Reg. No. 10 in force in relation to the activity.

The Lead Auditor, explained the requirements for the day and requested that an opening meeting be held to further elaborate. The Environment Manager made the arrangements for the opening meeting.

OPENING MEETING

The opening meeting commenced at 9.15 am and the following were in attendance:

Representing Company Ltd

| | |
|------------------|--------------------------------------|
| Mr. B. Oss | General Manager |
| Mr. I.N. Dusty | Safety, Health & Environment Manager |
| Mr. A.S. Sistant | Waste Minimisation Officer |

Representing the Environmental Protection Agency

| | |
|------------------|--------------|
| Mr. L. Auditor | Lead Auditor |
| Mr. I.N. Spector | Inspector |

Mr. L. Auditor gave a brief introduction to the Audit Objectives and scope of the audit and to the procedure to be followed for the remainder of the day.

ON SITE ASSESSMENT

Environmental Controls

Mr. I.N. Dusty was asked to give an overview of the main environmental control systems used on site. The effluent treatment plant and atmospheric emissions abatement systems were explained to the audit team along with a description of the surface water collection arrangement and storage practices used on site.

Review of Progress of EMP Implementation

A report on the Environmental Management Programme (EMP) was presented to the audit team. At the request of the lead auditor, the report was not gone through in detail. Rather particular emphasis was placed on the significant projects underway at the moment.

Licence Conditions

An evaluation of compliance with a selected set of licence conditions was carried out. These had been selected in advance of the audit and focused on conditions where programmes/reports were required in addition to examining some monitoring requirements.

Site Tour

A tour of the site was conducted, special attention was paid to areas identified during the morning discussions. These included:

- Effluent Treatment Plant;
- Surface water sampling point;
- Bulk and drum storage tank areas;
- Waste storage area;
- Composite sampler;
- Laboratory to inspect monitoring records;
- Thermal Oxidiser Bypass system;
- Sampling points on Carbon Adsorption system (VARA).

During the site tour, several people were interviewed in order to answer specific questions raised by the audit team. These personnel, in addition to those listed in Opening and Closing meeting lists, included the Maintenance Engineer, Environmental Supervisor, Laboratory Manager and Security Man.

Documentation

The following documentation was requested and reviewed by the audit team:

- Waste log;
- Operating instructions for Dissolved Air Flotation unit;
- Monitoring results on water discharge from firewater retention pond;
- Noise Survey;
- Emergency Response Procedure;
- Training Material used in company environmental training programme;
- Check sheets for inspection of aboveground flanges and valves;
- Calibration records for Dissolved Oxygen probes in Effluent Treatment Plant and Temperature Transmitters on Thermal Oxidiser;
- Pollution Emissions Register (PER) report for 1996;
- Sheets for recording the daily volume of groundwater discharged to the wastewater treatment system.

CLOSING MEETING

The closing meeting commenced at 4.10 PM and the following were in attendance
Representing Company Ltd.,

| | |
|--|--------------------------------------|
| Mr. B. Oss | General Manager |
| Mr. I.N. Dusty | Safety, Health & Environment Manager |
| Mr. A.S. Sistant | Waste Minimisation Officer |
| Mr. R.E. Pair | Maintenance Manager |
| Representing the Environmental Protection Agency | |
| Mr. L. Auditor | Lead Auditor |

Mr. L. Auditor gave a summary of the Audit findings. The licensee was found to be in non-compliance with its Integrated Pollution Control Licence in the areas listed below.

Observations made during the Audit (listed below), which did not constitute a breach of licence, were also discussed. The licensee was advised that these observations were made in the context of requirements of recent IPC conditions (particularly in relation to Environmental Management Systems) and as such should receive the companies attention.

The licensee was briefed on the Agency's reporting procedures and was advised that the Audit report would be issued. Finally, the licensee was thanked for the courteous and co-operative manner of the staff, and the assistance and co-operation extended during the Audit. This was particularly welcome in light of the fact that it was necessary to juggle existing work schedules of certain personnel and the Agency appreciates the effort made in this regard.

AUDIT FINDINGS

The audit process is a random sample on a particular day of a facility's compliance with some of its IPC licence conditions, lack of reporting of a non-compliance against a particular condition should not be construed to mean that there is full compliance with that condition of the licence.

NON-COMPLIANCES

1. The existing practice of mixing the firewater pond contents with the treated effluent prior to sampling and ultimate discharge is not in accordance with the requirements of the licence. The emission conditioned in Schedule 2(i) is not being monitored as set out in Schedule 2(iii). The final effluent holding tank is being used to mix the firewater contents with the treated effluent before sampling. This practice is an effective dilution of the effluent.

Attribution:

Condition 5.4 states:

All flow meters and monitors shall be operated and maintained as necessary so that monitoring accurately reflects the emission.

Corrective Action Required:

The dilution effect resulting from current arrangement does not lead to a representative sample of the effluent being taken for analysis. It therefore obscures any inefficiency in the operation of the biological treatment system. A similar comment would apply to the effluent screen for Organohalogens as any results would be skewed by the introduction of rainwater prior to sampling. The licensee is directed to address this issue as a matter of urgency.

2. The notification procedures followed in a number of recent incidents were found to be inadequate. The emergency relief valve activation's on the thermal oxidiser on the 23rd August and 29th October respectively were not notified to the Agency until the 29th August and 4th November.

Attribution:

Condition 4.1 states:

The licensee shall notify the Agency by telephone or facsimile to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:

Any release to atmosphere from any potential emission point

Corrective Action Required:

Review notification procedures to comply with Condition 4. It was the view of the audit team that there was a practice to await the resolution of the matter before reporting the incident. This is not necessary and the incident should be notified immediately to ensure the Agency is made aware of it.

3. The bunding on site for drum storage was found to be inadequate. Drums containing waste destined for off-site treatment/disposal were being stored in an open unbunded area.

Attribution:

Condition 9.4.1 states:

All storage tank areas shall be rendered impervious to the materials stored therein. In addition, storage tank areas shall be bunded, either locally or remotely, to a volume of 110% of the largest tank within each individual area. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the largest ten drum likely to be stored therein.

Corrective Action Required:

Review on-site storage and bunding procedures for all materials to ensure compliance with 9.4.1.

4. The surface water collection, monitoring and discharge systems were found to be in non-compliance with the requirements of the IPC licence. The redirection of the firewater retention pond water from the wastewater treatment plant to the Country Sump represents a change in the nature of an emission. The required surface water monitoring requirements were found not to be met by the licensee.

Attribution:

There are a number of conditions, which are not being met at the moment in relation to this issue. Conditions being contravened are;

Condition 1.2 - A change in the nature of an emission taking place without notification of the Agency

Condition 9.1.2 - Installation of a continuous TOC monitor

Condition 9.1.3 - Daily visual examination of the surface water emission

Condition 9.1.5 - Monitoring not being carried out in accordance with Schedule 5(i).

Corrective Action Required:

Review operational practices and procedures to comply with the specified requirements.

5. Backup equipment, as specified in Schedule 1(ii), was not available

Attribution:

Schedule 1(ii) requires the following;

Spare Carbon available for the Carbon Adsorption system on Emission Point CB 1-02

Spare recirculation pump and spare Scrubber Packing to be available for the Ammonia Scrubber on Emission Point CB 1-03

Corrective Action Required:

Ensure that Key Equipment Backup as specified in the licence be available as required.

6. The Noise Survey proposal and report, as required in Condition 8.2, had not been submitted to the Agency

Attribution:

Condition 8.2 states:

The licensee shall carry out a noise survey of the site operations once per year. The licensee shall consult with the Agency on the timing, nature and extent of the survey and shall develop a survey programme to the satisfaction of the Agency. The survey programme shall be submitted to the Agency in writing at least one month before the survey is to be carried out. This record shall be available for inspection by authorised persons of the Agency, at all reasonable times.

Corrective Action Required:

Submit annual proposal for Noise Survey in advance to the Agency as required.

7. The system in use for inspecting aboveground flanges and valves was not in accordance with the licence requirements. In particular, it was discovered that only a section of the pipework in question is inspected weekly.

Attribution:

Condition 9.4.5 states:

An inspection for leaks on all flanges and valves on aboveground pipes used to transport materials other than water shall be carried out weekly.

Corrective Action Required:

Modify inspection procedure to ensure compliance with licence requirements.

AUDIT OBSERVATIONS

While these observations do not constitute non-conformance's with any condition of the licence, they should be addressed by the licensee and reported back to the Agency in accordance with the request under Follow-Up Actions below.

1. Thermal Oxidiser Bypass Incidents

This item had been highlighted as an action item at previous audits. The Agency is satisfied that significant progress has been made as a result of work carried out to identify the root causes of the problem. It is encouraging that implementing modifications as a result of this work has resulted in an 80% reduction in incidents. It is further encouraging that consideration is being given to an alternative abatement system that would further minimise the problem. The Agency would appreciate being kept up to date with developments in this area.

2. Pollution Emissions Register (PER)

The PER report for 1996 was examined. It is recommended that in future years a comprehensive analysis of the findings be included with the figures. It was found that there was almost 17% of Dichloromethane usage unaccounted for and yet there were no recommendations on what steps would be taken in future years to address this and attempt to close the balance. The intention of the PER is to develop a suitable methodology for tracking of materials and then to extend this to include more materials on a year to year basis. With this in mind, each PER report should also include a proposal for the materials to be included in the next years study. The Agency's guidance on PER submissions, circulated to all licensees, should be consulted in this regard.

3 Environmental Management Systems/Standard Operating Procedures

The licensee informed the Agency that it intends to develop its EMS to a format that would enable it to comply with the requirement of ISO 14001, the Environmental Management Systems standard. The Agency would like to endorse this approach and would welcome the development of Standard Operating Procedures (SOPs) for issues such as pumping out from Bunds etc.

4 Waste Minimisation team/Management & Targeting Systems

It was noted, with regret, that the Waste Minimisation team had been dissolved. The Agency had welcomed this development as it was felt that a company wide committee set up to address reduction of waste at source would result in ideas and opportunities for improvement being identified at all levels of the organisation. It is hoped that Management and Targeting (M&T) system set up in its place will serve the same purpose. The Agency will follow the effectiveness of this system in future audits.

5 Training

The approach of the licensee with respect to training is welcomed by the Agency. The general Environmental Awareness training course given to employees during the year was very relevant and it is hoped that this material will be delivered to all employees on a phased basis.

FOLLOW-UP ACTIONS

The licensee should inform the Agency of the actions taken to close out the Corrective Action Requests raised during the audit within three months. These actions will be verified during subsequent audits.

While not directly relevant to the scope of the audit on the day, it was felt that there was insufficient information given to the audit team with regard to any safety precautions that should be observed on-site. The audit team had their own head protection and jackets with them but no safety glasses or ear protection was provided, despite entry into a designated hearing protection area.

Report prepared by: _____ Signed off by: _____
Mr I.N. Spector Dr Head of Department

Date: 31 December 1999 Date: 1 January 2000

11.5 Operator performance schedule: example from Scotland

The following is an example of a system used for appraising and reporting operator performance in Scotland. The scheme is entitled the Operator Performance Appraisal Scheme.

This scheme is used by inspectors to assess the performance of operators of certain types of process which require either Integrated Pollution Control (IPC) or Local Air Pollution Control (LAPC) licenses under the Environmental Protection Act 1990. OPA is also used in measuring SEPA's performance as a regulator.

The scheme is used to produce a confidential internal determination of an operator's performance using six key areas of measurements. A score of between 1 and 5 is awarded for each of the key areas. A score of 1 corresponds with exceptionally poor operation while a score of 5 is awarded for exemplary operation. An overall "satisfactory" or "unsatisfactory" assessment is also given; operation is judged to be satisfactory when:

- a) five of the key areas have a score of three or more; and
- b) the remaining key area has a score of at least 2

Guidance is given to inspectors on scoring. The report generated by the scheme is additional to the inspection report, which is produced for the visit. The OPA report is confidential and is retained for internal SEPA use only. A similar scheme (Operator Performance and Risk Appraisal) is operated by the EA in England and Wales. Another scheme (WOPA) also exists for waste management facilities.

Assessing Operator Performance

The Six Key Areas

Operator performance, as indicated above, is assessed in terms of six key areas, namely:

- Recording and use of information;
- Knowledge and implementation of authorisation requirements;
- Plant maintenance;
- Management and training;
- Process operation; and
- Incidents, complaints and non-compliance events.

It is important to note that in determining the score for each key area, only environmental performance is considered. Performance in terms of productivity, health and safety, etc. are not relevant in determining the score for each key area.

Each key area will now be looked at in more detail.

Key Area 1: Recording and use of information

In considering this key area, the following aspects of operator performance are considered:

- monitoring arrangements;
- process records;
- documentation; and
- use of monitoring or process information to manage the environmental performance of the process.

Every authorisation issued, whether for an IPC or a LAPC process requires the operator of the process to record specific information. This may include monitoring results, process information, olfactory assessment, training records, etc. and the authorisation for the process under consideration will specify the exact requirements. It is relatively easy to ascertain whether this information is being kept or not.

A check should also be made on the monitoring arrangements for the process under consideration. This will include not only the direct monitoring of emissions, but also other process controls and indicators of environmental performance such as the temperature in the combustion chamber of an incinerator, sulphur content of fuels, statistical process control of batch processes, solvent mass balance, etc.

A good operator will utilise the results of monitoring of emissions or other process information to manage the environmental performance of the process being carried on. Investigating process deviations or tracking monitoring results are examples of good practise in this area. Process information may also be used to advantage in waste minimisation programmes. Officers should judge the degree to which process information is being used by the operator.

Key Area 2: Knowledge and implementations of authorisation requirements

It is important that all personnel involved in the carrying on of a process are aware of the requirements of the authorisation, including the residual duty. A detailed knowledge of the authorisation is likely to be required by only a few personnel. However, a broader appreciation of the requirements of the authorisation is required by many other personnel. A good operator will have looked at their authorisation in detail and established systems and procedures clearly identifying who is responsible for what. In some organisation these responsibilities may be defined in Quality Assurance or Environmental Management Systems.

For a particular process, the knowledge and detail required by personnel is a function of the position they hold within the organisation, their job function and the size of the organisation. Clearly, an office secretary will not need to know in detail all the conditions of an authorisation.

However, the person whom the inspecting officer meets on a regular basis during routine and other visits, should have a detailed knowledge of the authorisation. The guidance on scoring recognises this and categorises staff as “Responsible

persons”, “Key personnel” or “Relevant staff”. Definitions of these terms are given in the guidance on scoring.

It is important to note that a “Responsible person” may also be “Key personnel” or “Relevant staff”. Definitions of these terms are given in the guidance on scoring.

It is important to note that a “Responsible person” may also be “Key personnel” or “Relevant Staff” or both for the purposes of the guidance on scoring.

SEPA officers should use their judgement when undertaking an OPA, as to whether personnel involved with the carrying on of a particular process have sufficient understanding of the authorisation requirements. It is not intended that officers should test the knowledge of specific staff, but by observing and talking to individuals, an understanding of the awareness of the requirements of the authorisation within a particular company or organisation will be gained.

Key Area 3: Plant maintenance

It is essential to maintain plant and equipment in a satisfactory condition if proper environmental performance is to be sustained. Maintenance can also give rise to releases to the environment and it is therefore important that maintenance operations are properly carried out.

The authorisation may set down specific maintenance requirements such as the periodic maintenance of pressure/vacuum valves at service stations. Compliance with this type of requirement is relatively easily verified.

Some authorisations impose a more general duty in respect of plant maintenance such as the documentation of procedures, and in others maintenance is left to the residual duty. In these cases SEPA officers should ask operators about how maintenance is carried out in order to establish a score for this key area.

A good operator will have established systems and procedures and a documented programme. The condition of the plant and premises is likely to provide an indication of the effectiveness of the maintenance programme.

The operator should not just look at the main process equipment when developing the maintenance programme. Where appropriate, “environmental critical” plant should be identified and particular attention given to those items. It is no good having a state of art pH meter is not calibrated regularly or the pumps do not work.

Key Area 4: Management and training

An authorisation, in essence, requires an operator to carry on a particular process with sufficient competent personnel to ensure satisfactory environmental performance.

In assessing this key area, SEPA officers should take into account whether there is:

- a commitment to environmental performance from senior management;
- the plant is effectively manned with personnel of appropriate skill levels;
- an appropriate training programme exists and the extent to which it covers all grades and types of personnel.
- there are clearly defined reporting routes which are known and understood, particularly for fault or emergency conditions;
- all relevant personnel have received training and information on the environmental consequences of releases.

Key Area 5: Process operation

The inspecting officer should ascertain whether:

- there are clearly defined, adequate operating procedures for the process;
- the operating procedures are in use;
- the effectiveness of these procedures.

This can be achieved through talking to relevant personnel and by checking such things as incident logs, process records etc.

Key Area 6: Incidents, complaints and non-compliance events

This key area looks at:

- the frequency of environmental incidents, justified complaints and non compliance events; and
- the company response to events.

Events and justified complaints over the previous 12 months are considered.

Care needs to be exercised in considering the level of complaint. A persistent complainant may have a legitimate reason for complaint, or may have a grudge against the Company. Only justified complaints should be taken into account in determining the score for this area.

The guidance on scoring uses such words and phrases as “formal letter”, “event” and “justifiable complaint” and these are defined in the notes to the guidance,

Undertaking an Assessment

Prior to carrying out the assessment it is helpful if information relating to the process is assembled. This will include inspection reports, monitoring returns, details of complaints and incidents, etc.

The inspecting officer starts the assessment by looking at each of the six key areas in turn. During the assessment the following steps are taken:

- i) The inspecting officer compares the performance of the operator with the score of OPA 1 for the relevant key area.
- ii) If the performance of the process operator is better than that required for scoring an OPA score of 1, then the performance is compared against the score of OPA 2.
- iii) If the performance is better than that required to score an OPA score of 2, comparison is made against the score of 3, and so on up to an OPA score of 5.
- iv) Where there is an area of doubt as to the final score of an operator on a given key area, assume that the higher score is relevant and award that score.
- v) After assessing all the six Key areas if the operator has scored 3 or more in 5 of the key areas and no less than 2 in the sixth key area then satisfactory compliance is deemed to have been achieved.
- vi) It is helpful to note key points which have been used to arrive at the score for key areas on the score sheet.

Scottish Environment Protection Agency Guidance on Quantifying an Operator Performance Appraisal (OPA)

| Attribute | OPA of 1 | OPA of 2 | OPA of 3 | OPA of 4 | OPA of 5 |
|---|---|--|--|---|---|
| 1. Recording and use of information | <ul style="list-style-type: none"> Limited or non-existent monitoring or records. No evidence of use of information in process management. Failure to record all data required by authorisation | <ul style="list-style-type: none"> Records available but some missing, or not of quality required by authorisation. Some information used in process management. | <ul style="list-style-type: none"> Information available as required by authorisation. Records used in process management. | <ul style="list-style-type: none"> Information readily available. More information than is required by authorisation is kept and used in process management. Information is forwarded promptly to inspector when required. Some information used in public communications, e.g. annual reporting for site. | <ul style="list-style-type: none"> Recording and assessing environmental information to higher level than specified in conditions. 100 per cent records kept available. Copies submitted promptly to inspector. Information used to high level in process management. Use of information in public communications. Information systems audited regularly. |
| 2. Knowledge and implementation of authorisation requirements | <ul style="list-style-type: none"> Authorisation unavailable. Relevant Person not aware of authorisation conditions. Significant outstanding relevant improvement programmes. | <ul style="list-style-type: none"> Authorisation not readily available. Key personnel not aware of / do not have access to main authorisation details. Key personnel do not understand all main requirements of authorisation, including BATNEEC and BPEO. Outstanding improvements required from improvement programme. | <ul style="list-style-type: none"> Key personnel aware of / have access to main authorisation details. Key personnel understand main requirements of authorisation, including, BATNEEC and BPEO. Operator aware of residual statutory requirements. | <ul style="list-style-type: none"> Relevant staff aware of / have access to main authorisation details. No significant outstanding improvements. All staff aware of requirement for authorisation of the process. | <ul style="list-style-type: none"> Current authorisation displayed or immediately available. Relevant staff aware of authorisation conditions. No outstanding improvements. Compliance audited regularly. |
| 3. Plant maintenance | <ul style="list-style-type: none"> No coherent maintenance programme. Maintenance takes no account of environmental effects of plant breakdown. Plant maintenance dependent solely on plant breakdown, i.e. reactionary maintenance. No priority assigned to environment-critical items. Plant operating requirements not defined. Haphazard maintenance procedures. High frequency of breakdowns / maintenance related environmental incidents. Equipment performance deteriorates significantly between maintenance activities. | <ul style="list-style-type: none"> Maintenance programme based on appropriate industrial standards. Plant unreliable and prone to breakdown. Maintenance programme includes shutdown periods, but not all plant serviced during these periods. Notifiable uncontrolled releases due to plant breakdown and maintenance activities occur. | <ul style="list-style-type: none"> Formally developed maintenance programme based on appropriate industrial standards. Maintenance programme takes into account environmental effects of breakdowns and maintenance operations. Environmentally critical plant and instrumentation is identified and included on maintenance programme. Uncontrolled releases due to plant breakdown and maintenance activities are small and insignificant, not requiring notification to SEPA. | <ul style="list-style-type: none"> Formally developed maintenance programme based on appropriate industrial standards, audited to ensure awareness of advances in technology. All critical equipment and operating parameters are identified and included on monitoring and maintenance programme. Uncontrolled releases due to plant maintenance or breakdown occur, infrequently, and are small and insignificant, not requiring notification to SEPA. | <ul style="list-style-type: none"> Advanced and regularly audited maintenance programme. Maintenance programme places priority on environmental consequences of breakdown and maintenance activities. Plant maintenance procedures clearly defined and followed. All critical equipment and operating parameters are monitored and maintained accordingly. Uncontrolled releases due to breakdown or maintenance activities do not occur. Maintenance programme ensures that the environmental performance of equipment does not deteriorate significantly. |

| Attribute | OPA of 1 | OPA of 2 | OPA of 3 | OPA of 4 | OPA of 5 |
|-----------|----------|----------|----------|----------|----------|
|-----------|----------|----------|----------|----------|----------|

EU Network for the Implementation and Enforcement of Environmental Law
 IMPEL Reference Book for Environmental Inspection

| | | | | | |
|--|---|---|---|--|---|
| <p>4. Management and training</p> | <ul style="list-style-type: none"> Plant ineffectively manned. Plant personnel have inappropriate skills for the task they are performing. Poorly defined reporting structure. No clearly identified responsible person Personnel not aware of consequences of releases from process. Little or no training on process or environmental issues. | <ul style="list-style-type: none"> Plant effectively manned for everyday occurrences. Personnel are trained but not necessarily competent in the tasks they are required to perform. Process generally controlled by a responsible person. Personnel not aware of consequences of releases from process. Training programme informal or not available. | <ul style="list-style-type: none"> Plant effectively manned. Personnel are well trained and competent in the tasks they are required to perform. Personnel aware of consequences of releases from process. Process controlled by a responsible person at all times. Formal training programme available. | <ul style="list-style-type: none"> Regular training updates occur via "toolbox talks" or other such means. Environmental targets set as part of management performance. Environmental policy available. Training records available for all relevant staff. Personnel trained and competent in two or more operations within process, allowing flexibility in cover and operation. | <ul style="list-style-type: none"> Advanced training in place. Involvement of senior management in training issues. Availability of competent replacement staff as required. Emergency and abnormal conditions considered and personnel aware of procedures to take in these events. Staff receive broad training, and refresher courses are available. Further education encouraged. Training process audited thoroughly. Commitment to environmental performance demonstrated within management and policy. |
| <p>5. Process operation</p> | <ul style="list-style-type: none"> No / poorly written procedures or instructions. Operations of plant haphazard. Plant / process changes not fully controlled. Frequent process deviations / near misses. | <ul style="list-style-type: none"> Procedures available, but not enforced. Inadequate shift handover procedures. Many process deviations / near misses. | <ul style="list-style-type: none"> Effective operating procedures available and implemented. Adequate control of process operations, shift handover and non-routine operations. Limited process deviations / near misses. | <ul style="list-style-type: none"> Effective operating procedures available, up-to-date, audited and being followed. Occasional process deviations / near misses. Process / plant changes well controlled. | <ul style="list-style-type: none"> Fully documented, up-to-date and comprehensive procedures and instructions are in place, audited and being followed. Process operations well controlled. Rare process deviations / near misses. Procedures identify environmental effects of operations. |
| <p>6. Incidents complaints and non-compliance events</p> | <ul style="list-style-type: none"> Repeated (>5 per year) notifications and incidents causing complaint, OR, one or more serious incident in the last year. More than three formal letters from SEPA in the last year. Failure to comply with enforcement notices. Enforcement action by SEPA necessary. Any prosecutions in the last year. | <ul style="list-style-type: none"> More than one but less than three formal letters from SEPA. Outstanding improvement action required after enforcement notice. More than three minor incidents or notifications per year, with no complaint arising. | <ul style="list-style-type: none"> Fewer than three minor incidents AND no serious incidents in the last year. Full compliance with enforcement notices. No more than one formal letter from SEPA in the last year. | <ul style="list-style-type: none"> No action taken by SEPA in the last year. No enforcement notices issued in last year. | <ul style="list-style-type: none"> No reportable incidents or justified complaints about process in the last year. No action taken by SEPA in the last year. |

SCOTTISH ENVIRONMENT PROTECTION AGENCY

NOT TO BE DISCLOSED

CONFIDENTIAL DELIBERATION

OPERATOR PERFORMANCE APPRAISAL WORKSHEET

Overall Comments:

| Attribute | Rating 1 – 5 1 = low 5 = high | Comments |
|--|--|-----------------|
| 1. Recording and use of information | | |
| 2. Knowledge and implementation of authorisation requirements | | |
| 3. Plant Maintenance | | |
| 4. Management and training | | |
| 5. Process operation | | |
| 6. Incidents, complaints and non-compliance events. | | |

Satisfactory Compliance:

Unsatisfactory Compliance:

11.6 Inspection follow-up

The preceding steps of the inspection process result in a provisional conclusion. This conclusion may include:

- inform the company on new developments
- a note on follow up/action points
- a note on time schedules

Compliance checking is followed by completion of the on-site visit or of the “desk type” inspection. This consists of:

- a summary of inspection results including a list of infringements and non-compliance items, but as well including positive observations/ improvements;
- a summary of required actions and measures, including time limits to improve the situation. The inspector also lists the consequences of repeated non-compliance in case of a follow-up inspection (e.g. proposed fines). It is essential that the company gains insight in the legal consequences of its environmental behaviour and possible follow-up actions.
- additional information on possibilities to implement cleaner technology/ waste minimising techniques/precautionary activities. This enables the company to take action to improve the environmental situation. Depending on the attitude (pro-active or defensive) of the company towards environmental issues the inspector can consider to provide information on self-monitoring possibilities and related items.

As stated in Section 10, the results of the on site visit are recorded in an official inspection report and if necessary an official report to be sent to the prosecutor.

Possible powers of inspectors in the framework of follow-up to an inspection

An example of the types of powers that may be available to inspectors through environmental laws is listed below (Principles of environmental enforcement, 1992).

Remedial actions:

- authority to impose a schedule for compliance;
- authority to temporarily shut down the installation or parts of it;
- authority to permanently shut down the installation or parts of it;
- authority temporarily shut down an entire facility;
- authority permanently shut down an entire facility;
- authority to deny a license;
- authority to revoke a license;
- authority to require a facility to clean up part of the environment;
- emergency powers to enter and correct immediate dangers to the environment or public health;
- authority to seek compensation for damage caused by violation.

Other:

- authority to require specific testing and reporting;
- authority to impose specific labelling instruments;
- authority to require (self) monitoring and reporting;
- authority to request information on industrial processes;
- authority to require specialised training for facility employees;
- authority to require a facility to undergo an environmental audit.

Sanctions:

- authority to impose a monetary penalty with specific amounts per day per violation;
- authority to seek imprisonment;
- authority to punitive damages or fines within specified limits;
- authority to seize property (confiscation);
- authority to seek reimbursement for government clean-up expenses;
- authority to bar a facility from government loans, guarantees or contracts;
- authority to require service or community work to benefit the environment;
- limitations on financial assistance.

One very important aspect in this is how different actions from different government institutions can be co-ordinated and communicated.

A full check of the follow-up activities can be done on the basis of the checklist presented on the next pages.

INSPECTION FOLLOW-UP: Checklist for the inspector

Are samples from the site visit analysed by accredited laboratories?

0 yes

Have the analytical results from the samples been evaluated?

0 yes

Is information submitted afterwards by the facility been evaluated?

0 yes

Were other inspecting bodies informed by sending the inspection report and/or a the notification?

0 yes

Is a follow-up inspection planned?

0 yes

Was the facility informed?

0 If so, (for companies observing the environmental rules) the facility was informed by

◇ a letter listing the findings of the inspection, the agreements, time schedules and/or the decisions made

◇ an inspection report, attached to the letter

0 If so, (for companies not observing the environmental rules) the facility was informed by

◇ warning letter including

◇ the infringements

◇ the measures that the facility is obliged to take to improve the environmental situation and to undo environmental damage

◇ a time frame included

◇ the punishments in case of repeated non-compliance described?

◇ the inspection report attached to the letter

Are follow-up inspections planned in co-operation with other enforcement authorities?

0 yes

Are the dossiers updated?

0 yes

IMPEL REFERENCE BOOK FOR ENVIRONMENTAL INSPECTION

PART IV: Annexes

Annex 1: Glossary

Annex 2: Relevant addresses

Annex 3: Environmental management
systems

Annex 4: BAT-notes

Annex 5: Literature on inspection

Annex 6: EU-Directives

Annex 7: Guidance Notes (United Kingdom)

Annex 8: Inspection Report (Portugal)

ANNEX 1: GLOSSARY

In this Annex 1 a listing is giving of important concepts, expressions and definitions that are relevant for the work of the inspector. It is important to note, that the list has become one of the outputs from the work of the IMPEL-INSPECT Project Team to Standing Committee 2 and has also been compiled by means of the report 'Principles of environmental enforcement' of the U.S. EPA.

Administrative law enforcement instruments

The public authority in charge of administrative law enforcement, have the following enforcement instruments at their disposal: supervision, application of administrative sanctions, encouragement and communication.

Inspectors may have the following administrative law powers to enable supervision:

- legal right to inspect bookkeeping documents and other business records, and the right to confiscate these;
- halt means of transport in order to inspect their cargo;
- right to enter a facility, buildings etc. at any time and without restrictions with measuring and sampling equipment when needed;
- the right to be accompanied by various external experts when entering a facility;
- examine and take samples of goods, compile an inventory and/or listings whenever the inspector considers this necessary.

The following administrative sanctions can be applied:

- exercise **executive coercion**: i.e. to take remedial action at the expense of the offender;
- impose sanctions (**penalty payments**): i.e. a penalty which applies as long as the illegal situation persists. The penalty has to be paid per offence over the period in which the illegal situation persisted [= coercion sum or environmental performance bond];
- change the licence or the exemption;
- (partially) cancel the licence or the exemption.

Compliance is often defined as full implementation of environmental requirements. Compliance occurs when requirements are met and desired changes are achieved (Principles of environmental enforcement, 1992).

Assessment

Collection and analysis of instructions, working methods, control mechanisms and performance indicators. *See also Monitoring.*

Best Available Techniques (BAT)

The most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and impact on the environment as a whole. (*Definition of BAT, see: 96/61/EC Integrated Pollution Prevention & Control Council Directive, Art. 2, 11 and Annex IV*).

BATNEEC

Best available technology not entailing excessive costs. *See also BAT*.

Compliance

Compliance is often defined as full implementation of environmental requirements. Compliance occurs when requirements are met and desired changes are achieved (Principles of environmental enforcement, 1992).

Compliance monitoring

Collecting and analysing information on compliance status.

Compliance promotion

The encouragement of voluntary compliance.

Condoning

The act by the competent authority to tolerate an illegal situation under strict written conditions.

Condoning (active) means that the competent authority explicitly makes clear in writing to the offender that no administrative enforcement action is taken against a certain illegal situation. Active condoning is allowed only under strict conditions.

Condoning (passive) means that the illegal situation is tolerated without any action of the competent authority towards the offender. Passive condoning is not allowed.

Corporate environmental plan

A plan in which the environmental effort to be made by a company is defined.

Criminal law enforcement instruments

In many EU Member States a public prosecutor will be in charge of the enforcement process in which criminal law is used to press charges. The public prosecutor is entitled to make the following decisions:

- impose certain provisional measures;
- apply to court to impose harsher measures than mentioned above;
- not to prosecute;
- not to prosecute under certain conditions;
- propose an out-of-court settlement;
- prosecute.

Criminal law enforcement is executed by the prosecutors of the Law courts within the Member States.

Criminal legal framework

| Measures under criminal law | Circumstances where these measures are applied |
|-----------------------------|---|
| Report | <ul style="list-style-type: none">- investigating inspector makes an official report- in some regions all the reports are sent to the public prosecutor |
| Prosecution | <ul style="list-style-type: none">- the public prosecutor decides on eventual prosecution- prosecution includes:<ul style="list-style-type: none">* out of court settling (by paying a fee);* starting a court procedure. |

Emission

The direct or indirect release of substances, vibrations, heat or noise from individual or diffuse sources in the installation into the air, water or land.

Enforcement

Enforcement comes into the picture when there is a failure to comply with one or more of the requirements placed on the company. Enforcement can be defined as the set of actions that governments or others take to achieve compliance and to correct or halt situations that endanger the environment or public health (Principles of environmental enforcement, 1992).

Facility

Any operation, equipment or business activity. See "installation"

Implementation

Implementation means compliance checking and compliance promotion. Implementation consists of the activities required to comply with legislation and may regard activities by inspectorates as well as companies.

Incident

Covers accidents (everything happening not expected and unwanted) and deliberate acts.

Inspection

The determination of the compliance status and the detection of violations.

Inspector

The person charged with compliance and enforcement in the broadest sense of the word. The term inspector is consequently used for synonyms like, government official, enforcement officer, etc.

Inspectorate

An authority charged with compliance and enforcement on either national, regional or local level. The term inspecting body is consequently used throughout the reference book and covers the various kinds of enforcement authorities (organisations charged with inspection and enforcement tasks).

Installation

The stationary technical unit where one or more activities are carried out. The term installation is consequently used for synonyms like facility, company, enterprise, industry, plant etc.

Investigation

The process of detection activities designed to discover criminal offences for the purpose of criminal law enforcement.

Investigating officials

The term investigating official is consequently used for police officers and the like. A distinction can be made between officers that have a general power of investigation and officials who have restricted powers of investigation (this means that the power of investigation is restricted to the investigation of certain offences made punishable in certain laws).

License

The part or the whole of a written decision (or several such decisions) granting authorisation to operate all or a part of an installation, subject to certain conditions which guarantee that the installation complies with the requirements. The term license is consequently used for synonyms such as permit, certificate etc.

Monitoring

See compliance monitoring.

Notice

Written information from the inspectorate to the company on compliance or non-compliance issues of the inspected installation.

Out-of-court settlement

A settlement between the public prosecutor and the suspect in which the suspect is given the opportunity to avoid further prosecution under strict written conditions. These conditions may comprise of the obligation to pay a fine, the obligation to take remedial action, the obligation to improve the internal environmental care in a company, the obligation to accept a press release of the out-of-court settlement.

Permit

See "license".

Primary supervision/first line inspection

The checking of compliance with legislation and regulations by the competent authority given responsibility by law for direct checking.

Promoting compliance

The use of communication, encouragement, supervision and other means to reach compliance with general and specific rules.

Provisional measures

If a serious suspicion of an environmental offence arises and immediate action is required, the public prosecutor may order the suspect to refrain from certain acts and/or to store and keep certain objects in a place designated in the order. He also can apply to the court for the imposition of more severe provisional measures. The court can for example order the (partial) closure of the suspect's facility, the appointment of an administrator to manage the affairs of the suspect, the (partial) divestment of certain rights and/or when violation gave rise to profits, the latter are confiscated.

Sanction

Any adverse consequence imposed on the violator

Secondary supervision/second line inspection

The checking by higher government authorities of the implementation by lower government authorities of their environmental functions (i.e. supervising the supervisors).

Self assessment

Collection and analysis of instructions, working methods, control mechanisms and performance indicators, executed by the company. See also "assessment".

Self monitoring

Collecting and analysing information on compliance status, executed by the company.

This may comprise measuring of emissions, discharges and/or performance parameters to provide information on the nature of the emitted pollutants and/or the operation of pollution abatement technologies.

Source

A facility or individual that generates (environmental) pollution.

Supervision

The checking by competent official designated as a supervisory officer. Supervisory activities may include site visits/inspections, the monitoring of emissions, the periodic evaluation of licences, the performance of environmental audits and checks on transport.

Target group policy

The arrangements made between the government authorities and the various target groups to achieve environmental targets within a given period.

**ANNEX 2: NATIONAL COORDINATORS, IMPEL ADDRESSES
& INTERNET SITES**

A) NATIONAL COORDINATORS IN THE EU MEMBER STATES

IMPEL SECRETARIAT

Mr Terry Shears,
Co-ordinator of IMPEL (SC 1),
DG XI, BU-5, 4/44,
Rue de la Loi 200,
B-1049 Brussels
Tel. +32 (2) 299 4383
Fax: +32 (2) 299 1070
E-mail: terence.shears@dg11.cec.be

AUSTRIA

Ms Elisabeth Motycka
Dept of International and EU Affairs
Federal Ministry of Environment,
Youth and Family Affairs
Stubenbastei 5
A-1010 VIENNA
tel. +43 1 51522 1628 fax +43 51522 7626
E-mail: elisabeth.motycka@bmu.gv.at

BELGIUM

Mr Jean Pierre JANSSENS
First Adviser
Brussels Institute for Environmental Management
Division of Inspection and Surveillance
Gulledelle 100
1200 BRUSSELS
tel. +32 2 775 7501 fax +32 2 775 7505
E-mail: jjp@ibgebim.be

DENMARK

Mr Gudmund NIELSEN
Head of Section
Danish Environmental Protection Agency
Strandgade 29
DK-1401 COPENHAGEN K
tel. +45 32 660 221 fax +45 660 479
E-mail: gni@mst.dk

FINLAND

Mr Markku HIETAMÄKI
Senior Technical Adviser
Ministry of the Environment
PO Box 380
FIN-00131 HELSINKI
Tel. +358 9 1991 9703 fax +358 9 1991 9453
E-mail: markku.hietamaki@vyh.fi

FRANCE

Ms Marie-Claude DUPUIS
Ministry of the Environment
DPPR/SEI
Avenue de Segur 20
F-75302 PARIS 07 SP
Tel. +33 1 4219 1440 fax +33 1 4219 1467
E-mail: Marie-claude.dupuis@environnement.gouv.fr

GERMANY

Mr Eckart MEYER-RUTZ
Head of Division
Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit
Kennedyallee 5
D-53175 BONN
tel. +49 228 305 2252 fax +49 228 305 2225
E-mail: meyer.eckart@bmu.de

GREECE

Mr Epaminondas Toleris,
Head of Infrastructures and Networks,
Environmental Planning Division,
Ministry of Environment, Physical Planning and Public Works,
147 Patission Street
GR-11251 Athens
Tel. +30 1 8623020
Fax: +30 1 8562024

IRELAND

Mr Bill McCUMISKEY
Director-General
Environmental Protection Agency
PO Box 3000
Johnstown Castle Estate
IR-Co. Wexford
Tel. +353 53 60600 fax +353 53 60696
E-mail: c.malone@epa.ie

ITALY

Mr Francesco LA CAMERA
Deputy Director-General,
Ministry of the Environment
Servizio VIA
Via Cristoforo Colombo 44
I-00147 ROME
tel. +39 06 5722 5025/6/7 fax +39 06 5722 5097
E-mail: francesco.lacamera@v.a.minambiente.it

LUXEMBOURG

Mr Théo WEBER
Deputy Director
Administration for the Environment
1 Rue Bender
L-1229 LUXEMBOURG
tel. +352 4056 56244 fax +352 4850 78
E-mail: weber@aev.etat.lu

NETHERLANDS

Mr Rob GLASER
Inspector International Affairs
Inspectorate-General for the Environment
PO Box 394
NL-4330 AJ MIDDELBURG
tel.+31 118 633792 fax +31 118 624126
E-mail: glaser@imh-zeeland.dgm.minvrom.nl **or** rob.glaser@wxs.nl

PORTUGAL

Ms Ana MAGRO E SILVA,
Inspectorate General for the Environment
Rua da Murgueira – Zambujal,
Apartado 7585 Alfragide
P-2720 392 AMADORA
tel. +351 21 4728241
fax +351 21 4728389
E-mail: asr@dga.min-amb.pt

SPAIN

Mr José Luis OBESSO GÓMEZ
Deputy Director-General for Impact Assessment
Ministry of Environment
Plaza San Juan de la Cruz S/N
E-28071 MADRID
Tel. +34 91 597 6072 fax +34 91 597 5816
E-mail: jluis.obesso@sgeaas.mma.es

SWEDEN

Ms Inga Birgitta LARSSON
Swedish Environmental Protection Agency
Naturvårdsverket
S-106 48 STOCKHOLM
tel. +46 8 698 1142 fax +46 8 698 1222
E-mail: ingabirgitta.larsson@environ.se

UNITED KINGDOM

Mr Nigel PEAPLE
EU and International Relations Manager,
Environment Agency
Rio House, Waterside Drive
Aztec West
Almondsbury
UK-BRISTOL BS32 4UD
tel. +44 1454 624 400 fax +44 1454 624 319
E-mail: nigel.peaple@environment-agency.gov.uk

B) INTERNET ADDRESSES

European Environmental Ministries:

| | |
|-----------------|--|
| Austria: | http://www.bmu.gv.at/bmu/bmufi.html |
| Belgium: | http://www.vmm.be/ http://www.mina.vlaanderen.be http://www.ibgebim.be http://www.wallonie.be/dgrne |
| Germany: | http://www.bmu.de/ |
| Denmark: | http://www.mem.dk/ukindex.htm |
| Ireland: | http://www.environ.ie/ |
| Spain: | http://www.mma.es/ |
| Finland: | http://www.vyh.fi/welcome_eng.html |
| France: | http://www.environnement.gouv.fr/ENGLISH/ |
| Greece: | http://www.minenv.gr/ |
| Italy: | http://wwwamb.casaccia.enea.it/default.htm |
| Luxembourg: | http://www.mev.etat.lu/ |
| Netherlands: | http://www.minvrom.nl/ |
| Portugal: | http://www.min-amb.pt/ |
| Sweden: | http://www.environ.se/www-eng/enghome.htm |
| United Kingdom: | http://www.environment.detr.gov.uk/ http://www.sepa.org.uk/ |

European Union Law

<http://europa.eu.int/eur-lex/en/index.html>

European Environmental Legislation

<http://www.eel.nl/>

European Environment Agency

<http://www.eea.eu.int>

<http://www.eea.dk/>

European Union

<http://europa.eu.int/>

European Commission

<http://europa.eu.int/comm/>

DG XI: Environment, Nuclear Safety and Civil Protection

<http://europa.eu.int/en/comm/dg11/dg11home.html>

International Network for Environmental Compliance and Enforcement

<http://www.inece.org/>

European Commission Joint Research Centre

<http://www.jrc.org/jrc/>

Organisation for Economic Co-operation and Development

<http://www.oecd.org/>

US Environmental Protection Agency

<http://www.epa.gov>

EPA's Office of Enforcement and Compliance Assurance

<http://es.epa.gov/oeca/polguid/>

Canadian EPA (CEPA) Enforcement and Compliance Policy

<http://www.ec.gc.ca/enforce/policy/>

United Nations Environmental Programme

<http://www.unep.org>

United Nations Environmental Programme - Industry and Environment

<http://www.unepie.org>

World Business Council for Sustainable Development (WBCSD)

<http://www.wbcsd.ch>

International Network for Environmental Management (INEM)

<http://www.inem.org>

The International Corporate Environmental Reporting Site

<http://www.enviroreporting.com>

Management Institute for Environment & Business of the World Resources Institute (WRI)

<http://www.wri.org/meb>

Sustainable Business Network (SBN)

<http://www.sbn.envirolink.org>

Sustainable Business

<http://www.sustainablebusiness.com>

Sistema de Informação Documental sobre Direito do Ambiente (SIDDAMB)

<http://www.diramb.gov.pt/>

ANNEX 3: ENVIRONMENTAL MANAGEMENT SYSTEM

For companies, environmental management systems pave the way for environmental regulations that are necessary for sustainable development.

It provides opportunities for more economical use of raw materials, energy savings, waste prevention and cleaner production processes and products. In addition it prevents the government from one-sidedly imposing environmental requirements that may lead to an increase of the financial burden of companies. By taking the initiative for environmental improvements companies are able to decide for themselves how environmental benefits can be obtained most efficiently.

Although environmental management systems can differ from one another, all (good) environmental management systems have the following common elements:

| Elements of an EMS | |
|---------------------------|---|
| – | Environmental policy statement (<i>including the commitment of the board of directors that the company will strive to continuous improvement of its environmental performance</i>); |
| – | Environmental programme (translating the environmental policy statement into activities and investments); |
| – | Integrating environmental management into business operations (registration of who is responsible for what (environmental) activities); |
| – | Measuring and recording (monitoring the environmental performance); |
| – | Regular internal audits; |
| – | Systematic internal education and training; |
| – | Annual internal and external environmental reports; |
| – | Regular third party auditing of the entire environmental management system. |

An EMS can be certified by an independent certification authority if it has a certain standard.

Two types of certified EMS can be distinguished:

- ISO 14000
- EMAS (EU Echo-Management and Audit Scheme)

ISO 14000-series is the series of standardisation descriptions issued by the International Standardisation Organisation.

EMAS is the Standardisation Scheme of the European Union.

Both have the purpose of stimulating companies to implement an EMS.

The main difference between ISO 14001 series and EMAS is the obligation of the latter to issue an annual external environmental report.

ANNEX 4: BAT-NOTES

Understanding industrial production processes

The effectiveness of the inspector's work is highly increased if his understanding of the industrial processes is adequate, up-to-date and relevant. A well prepared and informed inspector will be credible and respected by the company.

However, the variety of industrial processes is large, new developments are frequent and details of many processes are not publicly available. BAT-notes ("Best Available Techniques"), published by the European Commission, however, provide a useful set information on industrial processes and pollution abatement technologies.

The role of BAT

In the framework of the development of the Integrated Pollution Directive, the European Commission has developed and issued a number of so-called BAT-notes. BAT stands for "Best Available Techniques" (Sometimes, the expression BATNEEC is used, that stands for "Best Available Techniques Not Entailing Excessive Cost", however this expression has no official status). The BAT-notes are regarded not only as a useful tool for obtaining an overview of the "state-of-the-art" pollution control technology, but reflect also the standards and guidelines as envisaged by the European Commission. They contain useful sets of information on industrial processes, including:

- emission levels from installations
- specific emission factors (tonne pollutant per tonne of product manufactured)
- standard emission control technologies
- Best Available Technology
- costs of emission control technologies
- etc.

A full list of available notes is included in the following section.

BAT-NOTES

Activity

1 Minerals & Other Materials

- | | |
|--|----------------|
| 1.1 The extraction, production & processing of raw asbestos. | Awaiting draft |
| 1.2 The extraction of aluminium oxide from ore. | Published |
| 1.3 The extraction and processing of minerals. | Published |
| 1.4 The extraction of peat. | Draft |

2 Energy

2.1 The production of energy in plants > 50 MW. Draft note covers all activities 2.1 & 2.2 (V*8) in this section

2.2 The burning of fuel in a boiler >50 MW.

3 Metals

- 3.1 The melting or production of iron & steel. Draft (V2)
- 3.2 The processing of iron & steel in forges. Draft (V2)
- 3.3 The production, recovery, processing, use of ferrous metals. Draft (V3)
- 3.4 The production, recovery, processing, use of non-ferrous metals. Draft (V3)
- 3.5 The reaction of aluminium with chlorine. This section is covered in published Chemical note
- 3.6 Roasting, sintering or calcining of metallic ores. Draft (V3)
- 3.7 Swaging by explosives. Awaiting draft
- 3.8 Processing, drawing & stamping of large castings. Covered in draft note 3.2
- 3.9 Boilermaking & the manufacture of sheet metal containers. Published

4 Mineral Fibres & Glass

- 4.1 Processing of asbestos & the manufacture & processing of asbestos. Draft (V1)
- 4.2 Manufacture of glass fibre or mineral products fibre. Draft (V1)
- 4.3 The production of glass. Draft (V1)
- 4.4 The production of industrial diamonds. Awaiting draft

5 Chemical

Published Chemical Note covers all activities in 5.1-5.11 in this sector

6 Intensive Agriculture

- 6.1 The rearing of poultry. Published
- 6.2 The rearing of pigs. Published

7 Food and Drink

| | |
|--|------------|
| 7.1 Manufacture of vegetable & animal oils & fats. | Draft (V3) |
| 7.2 Manufacture of dairy products. | Draft (V3) |
| 7.3 Commercial brewing, distilling & malting. | Draft (V3) |
| 7.4 The slaughter of animals. | Published |
| 7.5 Manufacture of fish-meal and fish-oil. | Draft (V3) |
| 7.6 Manufacture of sugar. | Published |
| 7.7 Rendering of animals by-products. | Published |

8 Wood, Paper, Textiles & Leather

| | |
|---|--|
| 8.1 Board manufacture. | Published |
| 8.2 Pulp & Paper manufacture. | Draft note covers 8.1 manufacture of paper pulp & paper & 8.2 (V3) |
| 8.3 Wood Treatment & Preservation. | Published |
| 8.4 Manufacture of synthetic fibres. | Published |
| 8.5 Dyeing, treatment or finishing of fibres or textiles including carpet. | Published |
| 8.6 Fell-mongering & tanning. | Draft (V4) |

9 Fossil Fuels

| | |
|--|----------------|
| 9.1 The extraction of petroleum, gas, coal etc. | Awaiting draft |
| 9.2 Crude Petroleum handling & storage. | Draft (V3) |
| 9.3 The refining of petroleum or gas. | Draft (V3) |
| 9.4 Carbonisation, gasification etc. of coal, lignite, oil, bituminous shale. | Draft (V3) |

10 Cement

| | |
|----------------------------|-----------|
| 10.1 Production of cement. | Published |
|----------------------------|-----------|

11 Waste

| | |
|-----------|---|
| 11 Waste. | Published Waste Note covers all activities 11.1-11.4 in this sector |
|-----------|---|

12 Surface Coatings

- | | |
|--|------------|
| 12.1 Organo-tin coating. | Draft (V3) |
| 12.2 Manufacture or use of coating materials using organic solvents. | Published |
| 12.3 Electroplating operations. | Published |

13 Other activities

- | | |
|---|----------------|
| 13.1 The testing of engines, turbines & reactors. | Awaiting draft |
| 13.2 Manufacture of integrated circuits & printed circuit boards. | Published |
| 13.3 Lime production. | Draft (V3) |
| 13.4 Coarse ceramics. | Draft (V3) |

ANNEX 5: LITERATURE ON INSPECTION

General literature

1. U.S. EPA (1989): *Fundamentals of Environmental Compliance Inspections*. Government Institutes Inc., Maryland. ISBN 0-86587-782-3
2. U.S. EPA (1992): *Principles of Environmental Enforcement*. Office of Enforcement, U.S. Environmental Protection Agency Washington D.C. U.S.A.
3. IMPEL (November 1997): *Minimum Criteria for Inspections*
IMPEL (February 1999): *Frequency of Inspection*
IMPEL (February 1999): *Operator Self-Monitoring*
IMPEL (June 1999): *Planning and Reporting of Inspections*
4. *Improving compliance with International Environmental Law* (1996). J. Cameron, J. Werksman and P. Roderick.
5. Barcelona Conference on the law of the world (1991). *The application of criminal law instruments in environmental law enforcement*. A. Hamzah, R.M. Surachman.
6. *Compliance with International and European Environmental Obligations* (1996). Prof. A. Ch. Kiss.
7. *Compliance with EU directives: insights from international relations and comparative politics*. P.M. Haas, Journal of European Public Policy 5:1 March 1998: 17-37.
8. *Protecting the European Environment: Enforcing EC Environmental Law*. Journal of Environmental Law, 1989: 405-406.
9. *Enforcement: EU Parliament call for host of improvement environmental law enforcement*. Environment Watch Western Europe, 1992: 11-12.
10. *Enforcement: Problems continue with implementation of EU laws*. Environment Watch Western Europe, 1996: 10-11.
11. *Enforcement: Debate on EU Environmental Law Enforcement Heats Up*. Environment Watch Western Europe, 1992: 6-9.
12. *The Enforcement of EU Environmental Law: Article 69, the Ombudsman and the Parliament*. European Environmental Law Review, 1997: Vol. 6, No. 2, 46-52.

13. *Legislation for the Environment, does it work? - an empirical study into selected UK-based chemical manufacturing firms.* L. Zhuang and D. Synodinos. *Management Decision* 1997: Vol. 35, No. 7, 508-518.
14. *Environment: Commission Plans to Toughen Enforcement.* *Chemical Week*, 1996: Vol. 158, No. 43, 23.
15. *Monitoring pollution accident.* H.W. Gottinger. *European Journal of Operational Research* 1998: Vol. 104, 18-30.
16. *Scope and limits of the market mechanism in environmental management.* B. Gustafsson. *Ecological Economics* 1998: Vol. 24, 259-274.
17. *The implementation and effectiveness of International Environmental Commitments - Theory and Practice -*, edited by D.G. Victor, K. Raustiala and E.B. Skolnikoff, 1998.
18. *International Comparison of Environmental Controls on Industry*, Dutch Ministry of Environment (VROM) 1996.
19. *The structure and functions of Environmental Enforcement Organisations in EC Member States - with Annexes A (Organisations interviewed)+ B (Country Summaries)*, Dutch Ministry of Housing Physical Planning and Environment, 1991

Member States literature

Belgium

- (1) AMINAL (1998): *Milieuhandhavingsrapport 1997*. Ministerie van de Vlaamse Gemeenschap; dept. Leefmilieu en Infrastructuur. No.D/1998/3241/165, Brussel

Denmark

- (1) DEPA (1997): *Consolidated Environmental Protection Act No.625 of July 15, 1997*. Ministry of Environment and Energy, Denmark. ISBN 87-7819-915-9
- (2) Moe, M. (1995): *Environmental Administration in Denmark*. DEPA/Ministry of Environment and Energy, Denmark. *Environmental News* No.17, 1995. ISBN 87-7810-437-8
- (3) Danish EPA (1994) *Annual reports from municipalities and counties*
- (4) Danish EPA (1992) *Inspection and enforcement of Environmental Legislation in some EU Member States and regions*

Germany

- (1) Linnekamp,R. (1998): *Personal communication on The Structure and Organisation of Inspection in Nord-Rhein Westphalen.*

Ireland

- (1) EPA (1998): *Report on IPC Licensing and Control 1997. Irish Environmental Protection Agency*, Johnstown Castle Estate, Wexford, Ireland.
- (2) BAT-notes

Portugal

- (1) Portugal 1996, *Outline law for the Environment*.

Sweden

- (1) SEPA (1997): *Environmental Inspection and Enforcement in Sweden - A description* -. Swedish Environmental Protection Agency, Sweden.
- (2) Ministry of the Environment (1998): *The Environmental Code - A summary of the Government Bill on the Environmental Code (1997/98:45)*. Ministry of Environment, Sweden.
- (3) Ministry of the Environment (1998): *Swedish Environmental Quality Objectives - A summary of the Swedish Government's Bill 1997/98:145*. Ministry of Environment, Sweden.

United Kingdom

HMIPI (1990): Integrated Pollution control, EPA90, Guidance Notes IPC/G1-G3 for the use of enforcing authority and consulted authority inspectors on: Incident investigations; Inspection Reporting Protocols; Routine inspections, Planned and unplanned. HMIPI, 1999

ANNEX 6: EU-DIRECTIVES

In the European Union a substantial body of legislation has been developed regarding environmental protection. Main areas are:

- I. Water
- II. Control of Air Pollution
- III. Waste
- IV. Harmful substances: chemicals
- V. Noise

For the work of the Inspector the following EU-Directives may be particularly useful:

79/869/EEC Sampling & analysis of water

96/61/EC Integrated Pollution Prevention & Control Council Directive

96/82/EC Control of major Accident Hazards (Seveso II Directive)

82/501/EEC Major Accident Hazards of certain Industrial Activities (Seveso Directive)

85/337/EEC Environmental Impact Assessment

A full list of EU-Directive for the above-mentioned areas is given on the following pages.

II. Water

IA Fresh Water

Drinking Water

- Council Directive 75/440/EEC of 16 June 1975 Concerning the Quality Required of Surface Water Intended for the Abstraction of Drinking Water in the Member States

Sampling and Analysis

- Council Directive 79/869/EEC of 9 October 1979 Concerning the Methods of Measurement and Frequencies of Sampling and Analysis of Surface Water intended for the abstraction of drinking water in the Member States
 - * Council Directive 79/869/EEC of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking water in the Member States
Official Journal L 271, 29/10/1979 p. 0044 - 0053
Greek special edition: Chapter 15 Volume 1 p. 220
Spanish special edition: Chapter 15 Volume 2 p. 146
Portuguese special edition Chapter 15 Volume 2 p. 146
Finnish special edition: Chapter 15 Volume 2 p. 190
Swedish special edition: Chapter 15 Volume 2 p. 190
CONSLEG - 79L0869 - 01/01/1995 - 18 p.
CONSLEG - 75L0440 - 31/12/1991 - 12 p.

Water for Human Consumption

- Council Directive 80/778/EEC of 15 August 1980 Relating to the Quality of Water Intended for Human Consumption
 - * Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption
Official Journal L 330, 05/12/1998 p. 0032 - 0054
 - * Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption
Official Journal L 330, 05/12/1998 p. 0032 - 0054

Proposal for a New Drinking Water Directive

- Proposal for a Council Directive Concerning the Quality of Water Intended for Human Consumption Com (94) 612 final
 - * Further Proposal 95/L 131/03

Standards for Drinking Water

- Council Directive 80/777/EEC of 15 July 1980 on the Approximation of the Laws of the Member States Relating to the Exploitation and Marketing of Natural Mineral Waters

- * Directive 96/70/EC of the European Parliament and of the Council of 28 October 1996 amending Council Directive 80/777/EEC on the approximation of the laws of the Member States relating to the exploitation and marketing of natural mineral waters
Official Journal L 299, 23/11/1996 p. 0026 - 0028

Bathing Water

- Council Directive 76/160/EEC of 8 December 1975 Concerning the Quality of Bathing Water
- Commission Proposal 94/C 112/03 of 16 February 1994 Concerning the Quality of Bathing Water

Quality of Fresh Water to Protect Fish

- Council Directive 78/659/EEC of 18 July 1978 on the Quality of Fresh Waters Needing Protection or Improvement in Order to Support Fish Life

Shellfish Waters

- Council Directive 79/923/EEC of 30 October 1979 on the Quality Required of Shellfish Waters

Ground- Water

- Council Directive 80/68/EEC of 17 December 1979 on the Protection of Groundwater Against Pollution Caused by Certain Dangerous Substances
- Council Resolutions of 1992, 1994 and 1995 on the Protection of Groundwater

Dangerous Substances in Water

- Council Directive 76/464/EEC of 4 May 1976 on Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment of the Community 7
- Council Resolution of 7 February 1983 Concerning the Combating of Water Pollution 7
- Council Directive 86/280/EEC of 12 June 1986 on Limit Values and Quality Objectives for Discharges of Certain Dangerous Substances Included in List I of the Annex to Directive 76/464/EEC

First Amending Directive

- * Council Directive 88/347/EEC of 16 June 1988 amending Annex II to Directive 86/280/EEC on Limit Values and Quality Objectives for Discharges of Certain Dangerous Substances Included in List I of the Annex to Directive 76/464/EEC 7

Second Amending Directive

- * Council Directive 90/415/EEC of 27 July 1990 amending Annex II to Directive 86/280/EEC on Limit Values and Quality Objectives for Discharges of Certain Dangerous Substances Included in List I of the Annex to Directive 76/464/EEC
- * Proposal for a Council Directive of 8 February 1990

- * Amending Directive 76/464/EEC on Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment of the Community (COM (90)9)

Nitrates from Agricultural Sources

- Council Directive 91/676/EEC of 12 December 1991 Concerning the Protection of Waters Against Pollution Caused by Nitrates from Agricultural Sources

Exchange of Information/Quality of Fresh Water

- Council Decision 77/795/EEC of 12 December 1977 Establishing a Common Procedure for the Exchange of Information on the Quality of Surface Fresh Water in the Community
- Commission Decision 84/422/EEC of 24 July 1984 amending Annex I to Council Decision 77/795/EEC (above)
- Council Decision 86/574/EEC of 24 November 1986 Amending Decision 77/795/EEC (above)
- Council Decision 90/2/EEC of 14 December 1989 Amending Annex I to Council Decision 77/796/EEC (above)

Urban Waste Water Treatment

- Council Directive 91/271/EEC of 21 May 1991 Concerning Urban Waste Water Treatment

Ecological Quality of Water

- Proposal for a Council Directive on the Ecological Quality of Water of 15 June 1993 (Com (93) 680 final)

Questionnaire: Directives in the Water Sector

- Commission Decision 92/446/EEC Concerning Questions Relating to Directives in the Water Sector

IB Sea Water

Action Programme: Reduction of Pollution by Hydrocarbons Discharged at Sea

- Council Resolution of 26 June 1978 Setting up an Action Programme of the European Communities on the Control and Reduction of Pollution Caused by Hydrocarbons Discharged at Sea
- Commission Decision 80/686/EEC of 25 June 1980 Setting up an Advisory Committee on the Control and Reduction of Pollution Caused by Hydrocarbons Discharged at Sea

Information Systems

- Council Decision 81/971/EEC of 3 December 1981 Establishing a Community Information System for the Control and Reduction of Pollution Caused by Hydrocarbons Discharged at Sea

- Council Decision 86/85/EEC of 6 March 1986 Establishing a Community Information System for the Control and Reduction of Pollution Caused by the (Spillage of Hydrocarbons and Other Harmful Substances at Sea
- Council Decision 88/346/EEC of 16 June 1988 Amending Decision 86/85/EEC (above)

Convention for the Prevention of Marine Pollution from Land-based Sources

- Council Decision 85/613/EEC of 20 December 1985 Concerning the Adoption on Behalf of the Community of Programmes and Measures Relating to Mercury and Cadmium Discharges under the Convention for the Prevention of Marine Pollution from Land-based Sources

Accession: Helsinki Convention

- Council Decision 94/156/EEC of 21 February 1994 on the Accession of the Community to the Convention on the Protection of the Marine Environment of the Baltic Sea Area 1974 (Helsinki Convention)

Protection and Sustainable Use of the Danube

- Council Decision of 29 June 1994 on the Convention on Cooperation for the Protection and Long-term Use of the Danube

Cooperation Agreement: North-East Atlantic Waters Protection

- Council Decision 93/550/EEC of 20 October 1993 Concerning the Conclusion of the Cooperation Agreement for the Protection of the Coasts and Waters of the North-East Atlantic Against Pollution

Convention on the Protection and Use of Transboundary Watercourses

- Council Decision 95/308/EC of 24 July 1995 on the Conclusion, on Behalf of the Community, of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes

II. Control of Air Pollution

Exhaust Emissions and Motor Vehicles

- Council Directive 70/220/EEC of 20 March 1970 on the Approximation of the Laws of the Member States Relating to Measures to be Taken Against Air Pollution by Gases from Positive-Ignition Engines of Motor Vehicles
- Council Directive 74/290/EEC of 28 May 1974 Adapting to Technical Progress Council Directive 70/220/EEC (above)
- Commission Directive 77/102/EEC of 30 November 1976 Adapting to Technical Progress Council Directive 70/220/EEC (above)
- Council Directive 83/351/EEC of 16 June 1983 Amending Council Directive 70/220/EEC (above)
- Council Directive 88/76/EEC of 3 December 1987 Amending Council Directive 70/220/EEC on the Approximation of the Laws of the Member States Relating to Measures to be Taken Against Air Pollution by Gases from Engines of Motor Vehicles

- Council Directive 88/436/EEC of 16 June 1988 Amending Council Directive 70/220/EEC (above)
- Council Directive 89/458/EEC of 18 July 1989 Amending, with Regard to European Emission Standards for Cars below 1.4 litres, Directive 70/220/EEC (above)
- Commission Directive 89/491/EEC of 17 July 1989 Adapting to Technical Progress Council Directive 70/157/EEC, 70/220/EEC, 72/245/EEC, 72/306/EEC, 80/1268/EEC and 80/1269/EEC Relating to Motor Vehicles, *in fine*, Dealing with Pollution Control Matters
- Council Directive 91/441/EEC of 26 June 1991 Amending Directive 70/220/EEC (above)
- Council Directive 93/59/EEC of 28 June 1993 Amending Directive 70/220/EEC (above)
- Directive 94/12/EEC of the European Parliament and the Council of 23 March 1994 Relating to Measures to be Taken Against Air Pollution by Emissions from Motor Vehicles and Amending Directive 70/220/EEC (above)
- Amended Proposal of 10 November 1995 for a European Parliament and Council Directive Amending Directive 70/220/EC (above)
 - * Directive 98/69/EC of the European Parliament and of the Council of 13 October 1998 relating to measures to be taken against air pollution by emissions from motor vehicles and amending Council Directive 70/220/EEC
Official Journal L 350, 28/12/1998 p. 0001 - 0057
 - * Commission Directive 98/77/EC of 2 October 1998 adapting to technical progress Council Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against air pollution by emissions from motor vehicles (Text with EEA relevance)
Official Journal L 286, 23/10/1998 p. 0034 - 0052
 - * Directive 96/69/EC of the European Parliament and of the Council of 8 October 1996 amending Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against air pollution by emissions from motor vehicles
Official Journal L 282, 01/11/1996 p. 0064 - 0067
 - * Commission Directive 96/44/EC of 1 July 1996 adapting to technical progress Council Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against air pollution by emissions from motor vehicles (Text with EEA relevance)
Official Journal L 210, 20/08/1996 p. 0025 - 0045

- * Commission Directive 78/665/EEC of 14 July 1978 adapting to technical progress Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against pollution of the air by gases from positive ignition engines installed in motor vehicles
Official Journal L 223, 14/08/1978 p. 0048 - 0056
Greek special edition: Chapter 13 Volume 7 p. 172
Spanish special edition: Chapter 13 Volume 9 p. 21
Portuguese special edition: Chapter 13 Volume 9 p. 21
Finnish special edition: Chapter 15 Volume 2 p. 103
Swedish special edition: Chapter 15 Volume 2 p. 103

Commercial Vehicles: Emissions from Diesel Engines for Use in Vehicles

- Council Directive 88/77/EEC of 3 December 1987 on the Approximation of the Laws of the Member States Relating to the Measures to be Taken Against the Emission of Gaseous Pollutants from Diesel Engines for Use in Vehicles
- Council Directive 91/642/EEC of 1 October 1991 on the Approximation of the Laws of the Member States Relating to the Measures to be Taken Against the Emission of Gaseous Pollutants from Diesel Engines for Use in Vehicles
- Common Position 27/95/EC Adopted by the Council on 7 November 1995 with a View to Adopting Directive 95/.../EC of the European Parliament and of the Council Amending Directive 88/77/EEC (above)

Emission from Agricultural or Forestry Tractors

- Council Directive 77/537/EEC of 28 June 1977 on the Approximation of the Laws of the Member States Relating to the Measures to be Taken Against the Emission of Pollutants from Diesel-Engines for Use in Wheeled Agricultural and Forestry Tractors

Emission (Roadworthiness) Tests for Motor Vehicles and their Trailers

- Council Directive 92/55/EEC of 22 June 1992 Amending Directive 77/143/EEC on the Approximation of the Laws of the Member States Relating to Roadworthiness Tests for Motor Vehicles and their Trailers (Exhaust Emissions)

Lead Content of Petrol

- Council Directive 78/611/EEC of 29 June 1978 on the Approximation of the Laws of the Member States Concerning the Lead Content of Petrol
- Council Directive 85/210/EEC of 20 March 1985 on the Approximation of the Laws of the Member States Concerning the Lead Content of Petrol
- Council Directive 87/416/EEC of 21 July 1987 Amending Directive 85/210/EEC (above)

Level of Lead in the Air

- Council Directive 82/884/EEC of 3 December 1982 on a Limit Value for Lead in the Air

Sulphur Dioxide and Particulates

- Council Directive 80/779/EEC of 15 July 1980 on Air Quality Limit Values and Guide Values for Sulphur Dioxide and Suspended Particulates
- Council Resolution of 15 July 1980 on Transboundary Air Pollution by Sulphur Dioxide and Suspended Particulates
- Council Directive 89/427/EEC of 21 June 1989 Amending Directive 80/779/EEC on Air Quality Limit Values and Guide Values for Sulphur Dioxide and Suspended Particulates

VOC Emissions from Petrol Stations

- European Parliament and Council Directive 94/63/EC of 20 December 1994 on the Control of Volatile Organic Component (VOC) Emissions Resulting from the Storage of Petrol and its Distribution from Terminals to Service Stations

Sulphur Content of liquid Fuels

- Council Directive 75/716/EEC of 24 November 1975 on the Approximation of the Laws of the Member States Relating to the Sulphur Content of Certain Liquid Fuels
- Council Directive 87/219/EEC of 30 March 1987 Amending Directive 75/716/EEC
- Council Directive 93/12/EEC of 23 March 1993 Relating to the Sulphur Content of Certain Liquid Fuels

Air Quality Standards: Nitrogen Dioxide

- Council Directive 85/203/EEC of 7 March 1985 on Air Quality Standards for Nitrogen Dioxide

Ambient Air Quality Assessment and Management

- Proposal for a Council Directive on Ambient Air Quality Assessment and Management (COM (94) 109 final, 4 July 1994)
 - * Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
Official Journal L 296, 21/11/1996 p. 0055 - 0063

Measurement of Air Pollution: Exchange of Information

- Council Decision 82/459/EEC of 24 June 1982 Establishing a Reciprocal Exchange of Information and Data from Networks and Individual Stations Measuring Air Pollution within the Member States

Ambient Air Quality Assessment: Reciprocal Exchange of Information

- Proposal for a Council Decision Establishing a Reciprocal Exchange of Information and Data from Networks and Individual Stations Measuring Ambient air pollution within the Member States (COM (94) 345 final 7 September 1994)
- Amended Proposal for Establishing a Reciprocal Exchange of Information and Data from Networks of 28 November 1995 (COM (95) 468 final)

Air Pollution from Industrial Plants

- Council Directive 84/360/EEC of 28 June 1984 on the Combating of Air Pollution from Industrial Plants

Integrated Pollution Control

- Commission Proposal for a Council Directive 93/C 311/06 of 30 September 1993 for Integrated Pollution Prevention and Control (IPC) (COM (93) 43 final, 14 September 1993)
- Proposed Amendments on IPPC of 16 May 1995
 - * Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
Official Journal L 257, 10/10/1996 p. 0026 - 0040

Large Combustion Plants

- Council Directive 88/609/EEC of 24 November 1988 on the Limitation of Emissions of Certain Pollutants into the Air from Large Combustion Plants
- Council Directive 94/66/EC of 15 December 1994 Amending Directive 88/609/EEC (above)

Appliances Burning Gaseous Fuels

- Council Directive 90/396/EEC of 29 June 1990 on the Approximation of the Laws of the Member States Relating to Appliances Burning Gaseous Fuels

New Municipal Waste-Incineration Plants

- Council Directive 89/369/EEC of 8 June 1989 on the Prevention of Air Pollution from New Municipal Waste-Incineration Plants

Existing Municipal Waste-Incineration Plants

- Council Directive 89/429/EC of 21 June 1989 on the Reduction of Air Pollution from Existing Municipal Waste-Incineration Plants

Incineration of Hazardous Waste

- Council Directive 94/67/EC of 16 December 1994 on the Incineration of Hazardous Waste

Substances That Deplete the Ozone Layer

- Council Regulation 3322/88/EEC of 14 October 1988 on Certain Chlorofluorocarbons and Halons which Deplete the Ozone Layer
- Council Regulation (EC) 3093/94 of 15 December 1994 on Substances that Deplete the Ozone Layer
- Council Resolution of 14 October 1988 for the Limitation of Use of Chlorofluorocarbons and Halons
- Commission Recommendation 89/349/EEC of 13 April 1989 on the Reduction of Chlorofluorocarbons by the Aerosol Industry
- Council Decision 80/372/EEC of 26 March 1980 Concerning Chlorofluorocarbons in the Environment

- Council Regulation 594/91/EEC of 4 March 1991 on Substances that Deplete the Ozone Layer
 - * Council Regulation 3952/92/EEC of 30 December 1992, Amending Regulation 594/91/EEC in order to Speed up the Phasing-out of Substances that Deplete the Ozone Layer
Official Journal L 405, 31/12/1992 p. 0041
Finnish special edition: Chapter 15 Volume 12 p. 29
Swedish special edition: Chapter 15 Volume 12 p. 29
 - Commission Decision 94/84/EC of 4 February 1994 Allocating Import Quotas for the Fully Halogenated Chlorofluorocarbons 1, 12, 113, 114 and 115 etc
 - Commission Decision 94/827/EC of 20 December 1994 on the Allocation of Quantities of Controlled Substances Allowed for Essential Uses in the Community in 1995 under Council Regulation (EEC) No 594/91 as amended on Substances that Deplete the Ozone Layer
 - * Commission Decision of 17 July 1995 modifying Commission Decision 94/827/EC of 20 December 1994 on the allocation of quantities of controlled substances allowed for essential uses for 1995, under Council Regulation (EC) No 3093/94 on substances that deplete the ozone layer
Official journal NO. L 181, 01/08/1995 P. 0035 - 0039
 - Commission Decision 94/563/EC of 27 July 1994 on the Quantities of Controlled Substances Allowed for Essential Uses in the Community in 1995 Pursuant to Council Regulation (EEC) No 594/91, on Substances that Deplete the Ozone Layer
 - Commission's further Decisions Adopted in 1995 with Regard to Council Regulation 3093/94/EC
 - * Commission Regulation (EEC) No 2047/93 of 27 July 1993. Authorizing the trade of ozone depleting substances and products containing such substances with non-parties to the Montreal Protocol on substances that deplete the ozone layer.
Official Journal L 185, 28/07/1993 p. 0020
Finnish special edition: Chapter 15 Volume 12 p. 228
Swedish special edition: Chapter 15 Volume 12 p. 228
 - Council Decision of 12 December 1991 concerning the conclusion of the amendment to the Montreal Protocol on substances that deplete the ozone layer as adopted in June 1990 in London by the Parties to the Protocol
Official journal NO. L 377, 31/12/1991 P. 0028 - 0040
 - Council Decision of 14 October 1988 concerning the conclusion of the Vienna Convention for the protection of the ozone layer and the Montreal Protocol on substances that deplete the ozone layer
Official journal NO. L 297, 31/10/1988 P. 0008 - 0009
Finnish special edition: Chapter 11 Volume 14 P. 146
Swedish special edition: Chapter 11 Volume 14 P. 146
- Air Pollution by Ozone: Information, Warning*
- Council Directive 92/72/EEC of 21 September 1992 on Air Pollution by Ozone

The Convention on Long-Range Transboundary Air Pollution

- Council Decision 81/462/EEC of 11 June 1981 on the Conclusion of the Convention on Long-Range Transboundary Air Pollution
- Council Decision 86/277/EEC of 12 June 1986 on the Conclusion of the first Protocol to the 1979 Convention on Long-range Transboundary Air Pollution, on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)

Conclusion of the Agreement Amending the Community-COST Concentration Agreement on Atmospheric Pollution

- Council Decision 82/888/EEC of 17 December 1982 on the Conclusion of the Agreement Amending the Community-COST Concentration Agreement on a Concerted Action Project in the Field of Physic-Chemical Behaviour of Atmospheric Pollutants (COST project 61a bis)

UN Climate Change Convention

- Council Decision 94/69/EC of 15 December 1993 Concerning the Conclusion of the United Nations Framework Convention on Climate Change

III. Waste

Waste

- Council Directive 75/442/EEC of 15 July 1975 on Waste
- Council Directive 91/156/EEC of 18 March 1991 Amending Directive 75/442/EEC (above)
- Commission Decision 94/3/EC of 20 December 1993 Establishing a List of Wastes Pursuant to Article I(a) of Council Directive 75/442/EEC on Waste

Hazardous Waste

- Council Directive 91/689/EEC of 12 December 1991 on Hazardous Waste
- Council Directive 94/31/EEC of 27 June '1 994 Amending Directive 91/689/EEC (above)
- Council Decision of 22 December 1994 Establishing a List of Hazardous Waste Pursuant to Article 1(4) of Council Directive 91/689 on Hazardous Waste

Council Directive 94/67/EC of 16 December 1994 on the incineration of hazardous waste

Official Journal L 365 , 31/12/1994 p. 0034 - 0045

Finnish special edition: Chapter 15 Volume 14 p. 186

Swedish special edition: Chapter 15 Volume 14 p. 186

Transfrontier Shipment of Hazardous Waste

- Council Directive 84/631/EEC of 6 December 1984 on the Supervision and Control within the European Community of the Transfrontier Shipment of Hazardous Waste

First adaptation to technical progress

- * Commission Directive 85/469/EEC of 22 July 1985 Adapting to Technical

Progress Council Directive 84/631/EEC (above) Communication 87/C 64/03
Concerning Council Directive 84/631/EEC of 6 December 1984 (above)

First Amendment

- * Council Directive 86/279/EEC of 12 June 1986 Amending Directive 84/631/EEC (above)

Second adaptation to technical progress

- * Commission Directive 87/112/EEC of 23 December 1986 Adapting to Technical Progress for the Second Time Council Directive 84/631/EEC on the Supervision and Control within the European Community of the Transfrontier Shipment of Hazardous Waste
- * Council Resolution 89/C 9/01 of 21 December 1988 on Transfrontier Movements of Hazardous Waste into Third Countries
- * Council Regulation 259/93/EEC of 1 February 1993 on the Supervision and Control of Shipments of Waste Within, Into and Out of the European Community

First Amendment

- * Proposal for a Council Regulation (EC) (95/C 164/05) Amending Regulation 259/93/EEC (above)
- * Council Decision 93/98/EEC of 1 February 1993 on the Conclusion on Behalf of the Community of the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)
- * Commission Decision 94/575/EC of 20 July 1994 Determining the Control Procedure Under Council Regulation 259/93/EEC as Regards Certain Shipments of Waste to Certain Non-OECD Countries
- * Commission Decision 94/721/EC of 21 October 1994 Adapting Pursuant to Article 42(3) Annexes II, III and IV to Council Regulation (EEC) No 259/83 on the Supervision and Control of Shipments of Waste Within, Into and Out of the European Community
- * Commission Decision 94/774/EEC of 24 November 1994 Concerning the Standard Consignment Note Referred to in Council Regulation 259/93/EEC on the Supervision and Control of Shipments of Waste Within, Into and Out of the European Community

Disposal of Waste Oils

- Council Directive 75/439/EEC of 16 June 1975 on the Disposal of Waste Oils
- Council Directive 87/101/EEC of 22 December 1986 Amending Directive 75/439/EEC (above)

Treatment and Use of Sewage Sludge

- Council Decision 77/651/EEC of 27 September 1977 Adapting a European Economic Community Concerted Project in the Field of Treatment and Use of Sewage Sludge
- Council Decision 81/1063/EEC of 15 December 1981 on the Conclusion of a Community COST Concentration Agreement on a Concerted Action Project in the Field of Treatment and Use of Sewage Sludge (COST Project 68ter)
- Council Directive 86/278/EEC of 12 June 1986 on the Protection of the Environment and in Particular of the Soil, when Sewage Sludge is Used in Agriculture

Waste from the Titanium Dioxide Industry

- Council Directive 78/176/EEC of 20 February 1978 on Waste from the Titanium Dioxide Industry
- Council Directive 83/29/EEC of 24 January 1983 Amending Directive 78/176/EEC (above)
- Council Directive 82/883/EEC of 3 December 1982 on Procedures for the Surveillance and Monitoring of the Environment Concerned by Waste from the Titanium Dioxide Industry
- Council Directive 89/428/EEC of 21 June 1989 on Procedures for Harmonising the Programmes for the Reduction and Eventual Elimination of Pollution Caused by Waste from the Titanium Dioxide Industry
- Council Directive 92/112/EEC of 15 December 1992 on Procedures for the Surveillance and Monitoring of Environments Concerned by Waste from Titanium Dioxide Industry

Disposal of PCBs

- Council Directive 76/403/EEC of 6 April 1976 on the Disposal of Polychlorinated Biphenyl's and Polychlorinated Terphenyl's

Waste Paper – Re-use and Recycling

- Council Recommendation 81/972/EEC of 3 December 1981 Concerning the Re-use of Waste Paper and the Use of Recycled Paper

Containers of Liquids for Human Consumption

- Council Directive 85/339/EEC of 27 June 1985 on Containers of Liquids for Human Consumption

Packaging Waste

- European Parliament and Council Directive 94/62/EC of 20 December 1994 on Packaging and Packaging Waste

Batteries and Accumulators

- Council Directive 91/157/EEC of 18 March 1991 on Batteries and Accumulators Containing Certain Dangerous Substances

- * Commission Directive 98/101/EC of 22 December 1998 adapting to technical progress Council Directive 91/157/EEC on batteries and accumulators containing certain dangerous substances (Text with EEA relevance)
Official Journal L 001, 05/01/1999 p. 0001 - 0002

Waste Management Policy

- Council Decision 76/431/EEC of 21 April 1976 Setting up a Committee on Waste Management
- Council Resolution 90/C 122/02 of 7 May 1990 on Waste Policy

Proposal on the Landfill of Waste

- Amended Proposal for a Council Directive on the Landfill of Waste /COM(99J 275 final 10 June 1993)

IV. Harmful Substances: Chemicals

Classification, Packaging and labeling of Dangerous Substances: Chemicals

- Council Directive 67/548/EEC of 27 June 1967 on the Approximation of the Laws, Regulations and Administrative Provisions Relating to the Classification, Packaging and Labeling of Dangerous Substances

Second adaptation to technical progress

- * Commission Directive 79/370/EEC of 30 January 1979 on the second adaptation to technical progress of Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 088, 07/04/1979 p. 0001 - 0069
Greek special edition: Chapter 13 Volume 8 p. 45
Spanish special edition: Chapter 13 Volume 10 p. 3
Portuguese special edition Chapter 13 Volume 10 p. 3
Finnish special edition: Chapter 13 Volume 9 p. 161
Swedish special edition: Chapter 13 Volume 9 p. 161

Third adaptation to technical progress

- * Commission Directive 81/957/EEC of 23 October 1981 adapting to technical progress for the third time Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 351, 07/12/1981 p. 0005 - 0015
Spanish special edition: Chapter 13 Volume 12 p. 40
Portuguese special edition Chapter 13 Volume 12 p. 40
Finnish special edition: Chapter 15 Volume 3 p. 164
Swedish special edition: Chapter 15 Volume 3 p. 164

Fourth adaptation to technical progress

- * Commission Directive 82/232/EEC of 25 March 1982 adapting to technical progress for the fourth time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 106, 21/04/1982 p. 0018 - 0019
Spanish special edition: Chapter 13 Volume 12 p. 116
Portuguese special edition Chapter 13 Volume 12 p. 116
Finnish special edition: Chapter 13 Volume 12 p. 3
Swedish special edition: Chapter 13 Volume 12 p. 3

Fifth adaptation to technical progress

- * Commission Directive 83/467/EEC of 29 July 1983 adapting to technical progress for the fifth time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 257, 16/09/1983 p. 0001 - 0033
Spanish special edition: Chapter 13 Volume 14 p. 168
Portuguese special edition Chapter 13 Volume 14 p. 168
Finnish special edition: Chapter 13 Volume 13 p. 90
Swedish special edition: Chapter 13 Volume 13 p. 90

Sixth adaptation to technical progress

- * Commission Directive 84/449/EEC of 25 April 1984 adapting to technical progress for the sixth time Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 251, 19/09/1984 p. 0001 - 0223
Spanish special edition: Chapter 13 Volume 17 p. 3
Portuguese special edition Chapter 13 Volume 17 p. 3
Finnish special edition: Chapter 15 Volume 5 p. 3
Swedish special edition: Chapter 15 Volume 5 p. 3

Seventh adaptation to technical progress

- * Seventh Commission Directive 86/431/EEC of 24 June 1986 adapting to technical progress Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 247, 01/09/1986 p. 0001 - 0041
Finnish special edition: Chapter 13 Volume 16 p. 3
Swedish special edition: Chapter 13 Volume 16 p. 3

Eight adaptation to technical progress

- * Council Directive 87/432/EEC of 3 August 1987 on the eighth adaptation to technical progress of Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 239, 21/08/1987 p. 0001 - 0020
Finnish special edition: Chapter 15 Volume 8 p. 10
Swedish special edition: Chapter 15 Volume 8 p. 10

Ninth adaptation to technical progress

- * Commission Directive 88/302/EEC of 18 November 1987 adapting to technical progress for the ninth time Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 133, 30/05/1988 p. 0001 - 0002
Finnish special edition: Chapter 15 Volume 14 p. 3
Swedish special edition: Chapter 15 Volume 14 p. 3

Tenth adaptation to technical progress

- * Commission Directive 88/490/EEC of 22 July 1988 on the tenth adaptation to technical progress of Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 259, 19/09/1988 p. 0001 - 0024
Finnish special edition: Chapter 15 Volume 9 p. 3
Swedish special edition: Chapter 15 Volume 9 p. 3

Eleventh adaptation to technical progress

- * Council Directive 90/517/EEC of 9 October 1990 adapting to technical progress for the 11th time Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 287, 19/10/1990 p. 0037 - 0038

Twelfth adaptation to technical progress

- * Commission Directive 91/325/EEC of 1 March 1991 adapting to technical progress for the twelfth time Council Directive 67/548/EEC on the approximation of the laws, Regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 180, 08/07/1991 p. 0001 - 0078
Finnish special edition: Chapter 13 Volume 20 p. 120
Swedish special edition: Chapter 13 Volume 20 p. 120

Thirteenth adaptation to technical progress

- * Commission Directive 91/326/EEC of 5 March 1991 adapting to technical progress for the thirteenth time Council Directive 67/548/EEC on the approximation of laws, Regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 180, 08/07/1991 p. 0079 - 0080
Finnish special edition: Chapter 15 Volume 10 p. 122
Swedish special edition: Chapter 15 Volume 10 p. 122

Fourteenth adaptation to technical progress

- * Commission Directive 91/410/EEC of 22 July 1991 adapting to technical progress for the fourteenth time Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 228, 17/08/1991 p. 0067 - 0068
Finnish special edition: Chapter 13 Volume 20 p. 234
Swedish special edition: Chapter 13 Volume 20 p. 234

Fifteenth adaptation to technical progress

- * Commission Directive 91/632/EEC of 28 October 1991 adapting to technical progress for the fifteenth time Council Directive 67/548/EEC on the approximation of the laws, Regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 338, 10/12/1991 p. 0023 - 0024

Sixteenth adaptation to technical progress

- * Commission Directive 92/37/EEC of 30 April 1992 adapting to technical progress for the sixteenth time Council Directive 67/548/EEC on the approximation of the laws, Regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 154, 05/06/1992 p. 0030 - 0031
Finnish special edition: Chapter 15 Volume 11 p. 46
Swedish special edition: Chapter 15 Volume 11 p. 46

Seventeenth adaptation to technical progress

- * Commission Directive 92/69/EEC of 31 July 1992 adapting to technical progress for the seventeenth time Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 383, 29/12/1992 p. 0113 - 0235
Finnish special edition: Chapter 6 Volume 6 p. 3
Swedish special edition: Chapter 6 Volume 6 p. 3
L 383A 29/12/1992 P. 0001 - 0235

Eighteenth adaptation to technical progress

- * Commission Directive 93/21/EEC of 27 April 1993 adapting to technical progress for the 18th time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances
Official Journal L 110, 04/05/1993 p. 0020 - 0021
Finnish special edition: Chapter 13 Volume 24 p. 37
Swedish special edition: Chapter 13 Volume 24 p. 37

Nineteenth adaptation to technical progress

- * Commission Directive 93/72/EEC of 1 September 1993 adapting to technical progress for the nineteenth time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 258, 16/10/1993 p. 0029 - 0030
Finnish special edition: Chapter 13 Volume 25 p. 40
Swedish special edition: Chapter 13 Volume 25 p. 40

Twentieth adaptation to technical progress

- Commission Directive 93/101/EEC of 11 November 1993 adapting to technical Progress for the 20th time Council Directive 67/548/EEC on the Approximation of the Laws, Regulations and Administrative Provisions Relating to the Classification Packaging and Labelling of Dangerous Substances

Twenty-second adaptation to technical progress

- * Commission Directive 96/54/EC of 30 July 1996 adapting to technical progress for the twenty-second time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (Text with EEA relevance)
Official Journal L 248, 30/09/1996 p. 0001 - 0230

First Amendment

- * Directive 96/56/EC of the European Parliament and the Council of 3 September 1996 amending Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
Official Journal L 236, 18/09/1996 p. 0035 - 0035

Twenty-third adaptation to technical progress

- * Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (Text with EEA relevance)
Official Journal L 343, 13/12/1997 p. 0019 - 0024

Twenty-fourth adaptation to technical progress

- * Commission Directive 98/73/EC of 18 September 1998 adapting to technical progress for the 24th time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (Text with EEA relevance)
Official Journal L 305, 16/11/1998 p. 0001 - 0181

Twenty-fifth adaptation to technical progress

- * Commission Directive 98/98/EC of 15 December 1998 adapting to technical progress for the 25th time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (Text with EEA relevance)
Official Journal L 355, 30/12/1998 p. 0001 - 0624

Sixth adaptation to technical progress

Sixth Amendment

- Council Directive 79/831/EEC of 18 September 1979 Amending for the Sixth Time Directive 67/548/EEC on the Approximation of the Laws, Regulations and Administrative Provisions Relating to the Classification, Packaging and Labelling of Dangerous Substances

Seventh Amendment

- Council Directive 92/32/EEC of 30 April 1992 Amending for the Seventh Time Directive 67/548/EEC on the Approximation of the Laws, Regulations and Administrative Provisions Relating to the Classification, Packaging and Labelling of Dangerous Substances
 - * Commission Directive 93/105/EEC of 29 November 1993 Laying Down Annex VII D Containing Information Required to the Technical Dossier Referred to in Article 12 of the Seventh Amendment of Council Directive 67/548/EEC

Principles of Risk Assessment

- Commission Directive 93/67/EEC of 20 July 1993 Laying Down the Principles for Assessment of Risks to Man and the Environment of Substances Notified in Accordance with Council Directive 67/548/EEC
- Proposal (COM(93) 638 final, COD 480, Brussels, 21 December 1993; COM(94) 103 final, 12 April 1994) for a European Parliament and Council Directive Relating to the Classification, Packaging and Labelling of Dangerous Substances – Consolidated Text (presented by the Commission)

Classification, Packaging and Labelling of Dangerous Preparations

- Council Directive 88/379/EEC of 7 June 1988 on the Approximation of the Laws, Regulations and Administrative Provisions of the Member States Relating to the Classification, Packaging and Labelling of Dangerous Preparations
 - * Commission Directive 89/179/EEC of 22 February 1989 Adapting to Technical Progress Directive 88/379/EEC (above)

First adaptation to technical progress

- * Commission Directive 90/35/EEC of 19 December 1989 Defining in Accordance with Article 6 of Directive 88/379/EEC the Categories of Preparations, the Packaging of which Must be Fitted with Child-resistant Fastenings and/or Carry a Tactile Warning of Danger
- Commission Directive 90/492/EEC of 5 September 1990 Adapting to Technical Progress for the Second Time Council Directive 88/379/EEC (above)

Second adaptation to technical progress

- Commission Directive 93/18/EEC of 5 April 1993 adapting to Technical Progress for the Third Time Council Directive 88/379/EEC (above) p

Third adaptation to technical progress

- Commission Directive 91/115/EEC of 5 March 1991 Defining and Laying Down the Detailed Arrangements for the System of Specific Information Relating to Dangerous Preparations in Implementation of Article 10 Directive 88/379/EEC
- Commission Recommendation 92/214/EEC of 3 March 1992 Concerning the Information to be Provided by the Person Responsible for Placing a Dangerous Preparation on the Market when Making Use of the Provisions Relating to the Confidentiality of the Chemical Name of the Substance
- Commission Directive 93/112/EEC of 10 December 1993 Amending Commission Directive 91/155/EEC Defining and Laying Down the Detailed Arrangements for the System of Specific Information Relating to Dangerous Preparations in Implementation of Article 10 of Directive 88/379/EEC
COMMON POSITION (EC) No 54/98 adopted by the Council on 24 September 1998 with a view to the adoption of Directive 98/.../EC of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations
Official Journal C 360 , 23/11/1998 p. 0001

Restrictions on Marketing and Use of Certain Dangerous Substances

- Council Directive 76/769/EEC of 27 July 1976 on the Approximation of the Laws, Regulations and Administrative Provisions of the Member States Relating to Restrictions on the Marketing and Use of Certain Dangerous Substances and Preparations
 - First Amendment
 - * Council Directive 79/663/EEC of 24 July 1979 Supplementing the Annex to Council Directive 76/769/EEC (above)
 - Second Amendment: Benzene

- * Council Directive 82/806/EEC of 22 November 1982 Amending for the Second Time Directive 76/769/EEC (above) (Benzene)
- Third Amendment: PC TS
- * Council Directive 82/828/EEC of 3 December 1982 Amending for the Third Time Directive 76/769/EEC (above) (PCT)
- Fourth Amendment
- * Council Directive 83/264/EEC of 16 May 1983 Amending for the Fourth Time Directive 76/769/EEC (above) (Use of Certain Substances in Textile Articles)
- Fifth Amendment: Asbestos
- * Council Directive 83/478/EEC of 19 September 1983 Amending for the Fifth Time Directive 76/789/EEC (above) (Asbestos)
- Sixth Amendment: PCBs and PC Ts
- * Council Directive 85/467/EEC of 1 October 1985 Amending for the Sixth Time Directive 76/769/EEC (above) (PCBs/PCTs)
- Seventh Amendment: Asbestos
- * Council Directive 85/610/EEC of 20 December 1985 Amending for the Seventh Time Directive 76/769/EEC (above) (Asbestos)
- Eighth Amendment: Procedure for adaptation
- * Council Directive 89/677/EEC of 21 December 1989 Amending for the Eighth Time Directive 76/769/EEC (above)
 - * Council Directive 89/678/EEC of 21 December 1989 Amending Directive 76/769/EEC (above) (Procedure for Adaptation)
- Ninth Amendment
- * Council Directive 91/173/EEC of 21 March 1991 Amending for the Ninth Time Directive 76/769/EEC (above)
 - * Commission Decision 94/788/EEC of 14 September 1994 Concerning the Prohibition of PCP Notified by the Federal Republic of Germany
- Tenth Amendment: Cadmium
- * Council Directive 91/338/EEC 18 June 1991 Amending for the Tenth Time Directive 76/769/EEC (above) (Cadmium)
- Eleventh Amendment: Ugilec 121 or 21, 141 and OBBT substitutes for PCBs
- Sixteenth Amendment
- * Council Directive 91/339/EEC of 18 June 1991 Amending for the Eleventh Time Directive 76/769/EEC (above) (Ugilec 121 or 21, 141 and DBBT) Substitutes for PCBs

- * Directive 97/56/EC of the European Parliament and of the Council of 20 October 1997 amending for the 16th time Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations

Official Journal L 333, 04/12/1997 p. 0001 - 0084

- COMMON POSITION (EC) No 2/1999 adopted by the Council on 14 December 1998 with a view to the adoption of Directive 1999/.../EC of the European Parliament and of the Council amending for the 17th time Council Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations
Official Journal C 018, 22/01/1999 p. 0043 - 0046

First Adaptation to technical progress: Asbestos

- * Commission Directive 91/659/EEC of 3 December 1991 Adapting to Technical Progress Annex I to Council Directive 76/769/EEC (above) (Asbestos)

Twelfth Amendment: Nickel

- European Parliament and Council Directive 94/27/EEC of 30 June 1994 Amending for the Twelfth Time Directive 76/769/EEC (above)

Thirteenth Amendment:

Flammable Substances in Aerosols

- European Parliament and Council Directive 94/48/EEC of 7 December 1994 Amending for the Thirteenth Time Directive 76/769/EEC (above)

Second Adaptation to technical progress

- * Commission Directive 96/55/EC of 4 September 1996 adapting to technical progress for the 2nd time Annex I to Council Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (chlorinated solvents) (Text with EEA relevance)
Official Journal L 231, 12/09/1996 p. 0020 - 0021

Third Adaptation to technical progress

- * Commission Directive 97/10/EC of 26 February 1997 adapting to technical progress for the 3rd time Annex I to Council Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (CMRs) (Text with EEA relevance)
Official Journal L 068, 08/03/1997 p. 0024 - 0026

Fourth Adaptation to technical progress

- * Commission Directive 97/64/EC of 10 November 1997 adapting to technical progress for the fourth time Annex I to Council Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (lamp oils) (Text with EEA relevance)
Official Journal L 315, 19/11/1997 p. 0013 - 0014

Fourteenth Amendment:

CMRs, Creosotes and Chlorinated Solvents

- European Parliament and Council Directive 94/60/EEC of 20 December 1994 Amending for the Fourteenth time Directive 76/769/EEC (above)

Fifteenth Amendment

- * Directive 97/16/EC of the European Parliament and of the Council of 10 April 1997 amending for the 15th time Directive 76/769/EEC on restrictions on the marketing and use of certain dangerous substances and preparations
Official Journal L 116, 06/05/1997 p. 0031 - 0032

Batteries and Accumulators

- Council Directive 91/157/EEC of 18 March 1991 on Batteries and Accumulators Containing Certain Dangerous Substances
- Commission Directive 93/86/EEC Adapting to Technical Progress Council Directive 91/157/EEC on Batteries and Accumulators Containing Certain Dangerous Substances

Major Accident Hazards

- Council Directive 82/501/EEC of 24 June 1982 on the Major Accident Hazards of Certain Industrial Activities (The Seveso Directive)
- Council Directive 87/216/EEC of 19 March 1987 Amending Directive 82/501/EEC on the Major Accident Hazards of Certain Industrial Activities
- Council Directive 88/610/EEC of 24 September 1988 Amending Directive 82/501/EEC on the Major Accident Hazards of Certain Industrial Activities
- Commission Proposal 94/4 final of 26 January 1994 on the Control of Major Accident Hazards Involving Dangerous Substances (COMAH) (COM(94) 4 final)
- Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances (Seveso II Directive)
Official Journal L 010, 14/01/1997 p. 0013 - 0033

Pesticides: Classification, Packaging and Labelling

- Council Directive 78/631/EEC of 26 June 1978 on the Approximation of the Laws of the Member States Relating to the Classification, Packaging and Labelling of Dangerous Preparations (Pesticides)
First Adaptation (pesticides)
 - * Commission Directive 84/291/EEC of 18 April 1984 adapting Council Directive 78/631/EEC on the approximation of the laws of the Member States relating to the classification, packaging and labelling of dangerous preparations (pesticides)

Official Journal L 144, 30/05/1984 p. 0001 - 0009
Spanish special edition: Chapter 13 Volume 16 p. 22
Portuguese special edition Chapter 13 Volume 16 p. 22
Finnish special edition: Chapter 13 Volume 13 p. 192
Swedish special edition: Chapter 13 Volume 13 p. 192

First Amendment (pesticides)

* Council Directive 81/187/EEC of 26 March 1981 amending Directive 78/631/EEC on the approximation of the laws of the Member States relating to the classification, packaging and labelling of dangerous preparations (pesticides).

Official Journal L 088, 02/04/1981 p. 0029 - 0030
Spanish special edition: Chapter 13 Volume 11 p. 167
Portuguese special edition: Chapter 13 Volume 11 p. 167
Finnish special edition: Chapter 13 Volume 11 p. 112
Swedish special edition: Chapter 13 Volume 11 p. 112

- Commission Decision 78/436/EEC of 21 April 1978 Establishing a Scientific Committee for Pesticides

Plant Protection Products: Prohibition, Use and Marketing

- Council Directive 79/117/EEC of 21 December 1978 Prohibiting the Placing on the Market and Use of Plant Protection Products Containing Certain Active Substances

- Council Directive 91/414/EEC of 15 July Concerning the Placing of Plant Protection Products on the Market

First Amendment of the annex

* Commission Directive 83/131/EEC of 14 March 1983 amending the Annex to Council Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances

Official Journal L 091, 09/04/1983 p. 0035 - 0035
Spanish special edition: Chapter 3 Volume 27 p. 129
Portuguese special edition: Chapter 3 Volume 27 p. 129
Finnish special edition: Chapter 3 Volume 16 p. 71
Swedish special edition: Chapter 3 Volume 16 p. 71

Second Amendment of the annex

* Commission Directive 85/298/EEC of 22 May 1985 amending for the second time the Annex to Council Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances

Official Journal L 154, 13/06/1985 p. 0048 - 0048
Spanish special edition: Chapter 3 Volume 35 p. 109
Portuguese special edition: Chapter 3 Volume 35 p. 109
Finnish special edition: Chapter 3 Volume 18 p. 188
Swedish special edition: Chapter 3 Volume 18 p. 188

First Amendment

* Council Directive 86/214/EEC of 26 May 1986 amending Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official Journal L 152, 06/06/1986 p. 0045 - 0045

Finnish special edition: Chapter 3 Volume 21 p. 72

Swedish special edition: Chapter 3 Volume 21 p. 72

Second Amendment

- * Council Directive 86/355/EEC of 21 July 1986 amending Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official Journal L 212, 02/08/1986 p. 0033 - 0034
Finnish special edition: Chapter 3 Volume 21 p. 217
Swedish special edition: Chapter 3 Volume 21 p. 217

Amendment of the annex

- * Council Directive 87/181/EEC of 9 March 1987 amending the Annex to Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official Journal L 071, 14/03/1987 p. 0033 - 0033
Finnish special edition: Chapter 3 Volume 22 p. 240
Swedish special edition: Chapter 3 Volume 22 p. 240

Third Amendment of the annex

- * Commission Directive 87/477/EEC of 9 September 1987 amending for the third time the Annex to Council Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official Journal L 273, 26/09/1987 p. 0040 - 0040
Finnish special edition: Chapter 3 Volume 24 p. 130
Swedish special edition: Chapter 3 Volume 24 p. 130

Fourth Amendment of the annex

- * Commission Directive 90/335/EEC of 7 June 1990 amending for the fourth time the Annex to Council Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official journal NO. L 162, 28/06/1990 P. 0037 - 0037
Finnish special edition: Chapter 3 Volume 33 P. 12
Swedish special edition: Chapter 3 Volume 33 P. 12

Amendment of the annex

- * Council Directive 90/533/EEC of 15 October 1990 amending the annex to Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official Journal L 296, 27/10/1990 p. 0063 - 0063
Finnish special edition: Chapter 3 Volume 34 p. 206
Swedish special edition: Chapter 3 Volume 34 p. 206

Fifth Amendment of the annex

- * Commission Directive 91/188/EEC of 19 March 1991 amending for the fifth time the Annex to Council Directive 79/117/EEC prohibiting the placing on the market and use of plant protection products containing certain active substances
Official Journal L 092, 13/04/1991 p. 0042 - 0042
Finnish special edition: Chapter 3 Volume 37 p. 11
Swedish special edition: Chapter 3 Volume 37 p. 11

Third Amendment

- * Commission Directive 93/71/EEC of 27 July 1993 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market
Official Journal L 221, 31/08/1993 p. 0027 - 0036
Finnish special edition: Chapter 3 Volume 52 p. 44
Swedish special edition: Chapter 3 Volume 52 p. 44

Fourth Amendment

- * Commission Directive 94/37/EC of 22 July 1994 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market
Official Journal L 194, 29/07/1994 p. 0065 - 0081
Finnish special edition: Chapter 3 Volume 59 p. 204
Swedish special edition: Chapter 3 Volume 59 p. 204

Fifth Amendment

- * Commission Directive 95/35/EC of 14 July 1995 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market
Official Journal L 172, 22/07/1995 p. 0006 - 0007

Sixth Amendment

- * Commission Directive 95/36/EC of 14 July 1995 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market
Official Journal L 172, 22/07/1995 p. 0008 - 0020

Seventh Amendment

- * Commission Directive 96/12/EC of 8 March 1996 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market (Text with EEA relevance)
Official Journal L 065, 15/03/1996 p. 0020 - 0037

Eight Amendment

- * Commission Directive 96/46/EC of 16 July 1996 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market (Text with EEA relevance)
Official Journal L 214, 23/08/1996 p. 0018 - 0024

Ninth Amendment

- * Commission Directive 96/68/EC of 21 October 1996 amending Council Directive 91/414/EEC concerning the placing of plant protection products on the market (Text with EEA relevance)
Official Journal L 277, 30/10/1996 p. 0025 - 0034

- Commission Regulation 3600/92/EEC of 11 December 1992 laying down Rules for the Implementation of the First Programme of Work as
 - * Referred to in 91/414/EEC o Commission Directive 93/71/EEC of 27 July 1993 Amending Council Directive (above)
- Commission Regulation 933/94/EC of 27 April 1994 Laying Down the Active Substances for Plant Protection Products and Designating the Rapporteur Member States for the Implementation of Commission Regulation 3600/92/EEC
- Council Directive 97/57/EC of 22 September 1997 establishing Annex VI to Directive 91/414/EEC concerning the placing of plant protection products on the market
Official Journal L 265, 27/09/1997 p. 0087 - 0109
- Commission Directive 94/79/EEC of 21 December 1974 Amending Council Directive 91/414/EEC (above)
- Commission Decision 95/276/EEC of 13 July 1995 Concerning the Withdrawal of Authorizations for Plant Protection Products Containing Ferbam or Azinphos-ethyl as Active Substances

Pesticide Residues: Fruit and Vegetables

- Council Directive 76/895/EEC of 25 September 1976 Relating to the Fixing of Maximum Levels for Pesticides in and on Fruit and Vegetables (Framework Directive)
First Amendment to annex II
 - * Commission Directive 80/428/EEC of 28 March 1980 amending Annex II to Council Directive 76/895/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables
Official Journal L 102, 19/04/1980 p. 0026 - 0026
- Second Amendment to annex II
 - * Council Directive 81/36/EEC of 9 February 1981 amending Annex II to Directive 76/895/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables
Official Journal L 046, 19/02/1981 p. 0033 - 0034
Spanish special edition: Chapter 3 Volume 21 p. 38
Portuguese special edition Chapter 3 Volume 21 p. 38
Finnish special edition: Chapter 3 Volume 13 p. 12
Swedish special edition: Chapter 3 Volume 13 p. 12
- Third Amendment to annex II
 - * Council Directive 82/528/EEC of 19 July 1982 amending Annex II to Directive 76/895/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables
Official Journal L 234, 09/08/1982 p. 0001 - 0004
Spanish special edition: Chapter 3 Volume 26 p. 38
Portuguese special edition Chapter 3 Volume 26 p. 38
Finnish special edition: Chapter 3 Volume 15 p. 132
Swedish special edition: Chapter 3 Volume 15 p. 132

Fourth Amendment to annex II

- * Council Directive 88/298/EEC of 16 May 1988 amending Annex II to Directives 76/895/EEC and 86/362/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables and cereals respectively
Official Journal L 126, 20/05/1988 p. 0053 - 0054
Finnish special edition: Chapter 3 Volume 26 p. 180
Swedish special edition: Chapter 3 Volume 26 p. 180

Fifth Amendment to annex II

- * Council Directive 89/186/EEC of 6 March 1989 amending Annex II to Directive 76/895/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables
Official Journal L 066, 10/03/1989 p. 0036 - 0036
Finnish special edition: Chapter 3 Volume 28 p. 172
Swedish special edition: Chapter 3 Volume 28 p. 172

Sixth Amendment to annex II

- * Council Directive 93/58/EEC of 29 June 1993 amending Annex II to Directive 76/895/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables and the Annex to Directive 90/642/EEC relating to the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables, and providing for the establishment of a first list of maximum levels
Official Journal L 211, 23/08/1993 p. 0006 - 0039
Finnish special edition: Chapter 3 Volume 52 p. 8
Swedish special edition: Chapter 3 Volume 52 p. 8

Seventh Amendment of annex II

- * Council Directive 96/32/EC of 21 May 1996 amending Annex II to Directive 76/895/EEC relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables and Annex II to Directive 90/642/EEC relating to the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables, and providing for the establishment of a list of maximum levels.
Official Journal L 144, 18/06/1996 p. 0012 - 0034
- Council (Framework) Directive 90/642/EEC of 27 November 1990 Fixing Mandatory Maximum Residue Levels (MRLs) for Pesticide Residues in and on Fruit and Vegetables
 - * Council Directive 95/61/EC of 29 November 1995 amending Annex II to Directive 90/642/EEC relating to the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables
Official journal NO. L 292, 07/12/1995 P. 0027 - 0030
 - * Council Directive 94/30/EC of 23 June 1994 amending Annex II to Directive 90/642/EEC relating to the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables and providing for the establishment of a list of maximum levels

Official Journal L 189, 23/07/1994 p. 0070 - 0083

Finnish special edition: Chapter 3 Volume 59 p. 128

Swedish special edition: Chapter 3 Volume 59 p. 128

- Council Directive 95/38/EEC of 17 July 1995 Amending Annexes I and II to Directive 90/642/EEC
- Recommendation of the EFTA Surveillance Authority of 19 April 1995 Concerning a Coordinated Programme of Inspections in 1995 to Ensure Compliance with Maximum Levels of Pesticide Residues in and on Certain Products of Plant Origin, including Fruit and Vegetables

Residue limits for Cereals

- Council Directive 86/362/EEC of 24 July 1986 Fixing Maximum Residue Limits for Cereals
- Council Directive 86/363/EEC of 24 July 1986 on the Fixing of Maximum Levels for Pesticide Residues in and on Foodstuffs of Animal Origin
 - * Council Directive 93/57/EEC of 29 June 1993 Amending the Annexes to Directive 86/362/EEC (above)
- Council Directive 95/39/EEC of 17 July 1995 Amending the Annexes to Directives 86/362/EEC and 86/363/EEC (above)
 - * Council Directive 94/29/EC of 23 June 1994 amending the Annexes to Directives 86/362/EEC and 86/363/EEC on the fixing of maximum levels for pesticide residues in and on cereals and foodstuffs of animal origin respectively
Official journal NO. L 189, 23/07/1994 P. 0067 - 0069
Finnish special edition: Chapter 3 Volume 59 P. 124
Swedish special edition: Chapter 3 Volume 59 P. 124
 - * Council Directive 96/33/EC of 21 May 1996 amending the Annexes to Directives 86/362/EEC and 86/363/EEC on the fixing of maximum levels for pesticide residues in and on cereals and foodstuffs of animal origin respectively
Official Journal L 144, 18/06/1996 p. 0035 - 0038
 - * Council Directive 97/41/EC of 25 June 1997 amending Directives 76/895/EEC, 86/362/EEC, 86/363/EEC and 90/642/EEC relating to the fixing of maximum levels for pesticide residues in and on, respectively, fruit and vegetables, cereals, foodstuffs of animal origin, and certain products of plant origin, including fruit and vegetables
Official Journal L 184, 12/07/1997 p. 0033 - 0049
 - * Commission Directive 97/71/EC of 15 December 1997 amending the Annexes to Council Directives 86/362/EEC, 86/363/EEC and 90/642/EEC on the fixing of maximum levels for pesticide residues in and on cereals, foodstuffs of animal origin and certain products of plant origin, including fruit and vegetables respectively (Text with EEA relevance)
Official Journal L 347, 18/12/1997 p. 0042 - 0044

- * Commission Directive 98/82/EC of 27 October 1998 amending the Annexes to Council Directives 86/362/EEC, 86/363/EEC and 90/642/EEC on the fixing of maximum levels for pesticide residues in and on cereals, foodstuffs of animal origin and certain products of plant origin, including fruit and vegetables respectively (Text with EEA relevance)
Official Journal L 290, 29/10/1998 p. 0025 - 0054

Animal feeding Stuffs

- Council Directive 91/132/EEC of 4 March 1991 Amending Directive 74/63/EEC (above)
- Directive 74/63/EEC on Undesirable Substances and Products in Animal Nutrition Council Directive 87/519/EEC (almost identical to Directive 91/132/EEC)
 - * Commission Directive 97/8/EC of 7 February 1997 amending Council Directive 74/63/EEC on undesirable substances and products in animal nutrition (Text with EEA relevance)
Official Journal L 048, 19/02/1997 p. 0022 - 0030
 - * Commission Directive 96/6/EC of 16 February 1996 amending Council Directive 74/63/EEC on undesirable substances and products in animal nutrition (Text with EEA relevance)
Official Journal L 049, 28/02/1996 p. 0029 - 0030
 - * Commission Directive 94/16/EEC of 22 April 1994 amending Council Directive 74/63/EEC on undesirable substances and products in animal nutrition
Official Journal L 104, 23/04/1994 p. 0032 - 0033
Finnish special edition: Chapter 3 Volume 56 p. 336
Swedish special edition: Chapter 3 Volume 56 p. 336
 - * Council Directive 92/88/EEC of 26 October 1992 amending Directive 74/63/EEC on undesirable substances and products in animal nutrition
Official Journal L 321, 06/11/1992 p. 0024 - 0026
Finnish special edition: Chapter 3 Volume 45 p. 172
Swedish special edition: Chapter 3 Volume 45 p. 172
CONSLEG - 74L0063 - 22/09/1993 - 41 p.
 - * Commission Directive 92/63/EEC of 10 July 1992 amending the Annexes to Council Directive 74/63/EEC on undesirable substances and products in animal nutrition
Official journal NO. L 221, 06/08/1992 P. 0049 - 0050
Finnish special edition: Chapter 3 Volume 44 P. 113
Swedish special edition: Chapter 3 Volume 44 P. 113
CONSLEG - 74L0063 - 22/09/1993 - 41 P.
 - * Commission Directive 91/126/EEC of 13 February 1991 amending the Annexes to Council Directive 74/63/EEC on undesirable substances and products in animal nutrition
Official Journal L 060, 07/03/1991 p. 0016 - 0017
Finnish special edition: Chapter 3 Volume 36 p. 195
Swedish special edition: Chapter 3 Volume 36 p. 195
CONSLEG - 74L0063 - 22/09/1993 - 41 p.
 - * Council Directive 87/519/EEC of 19 October 1987 amending Directive 74/63/EEC on undesirable substances and products in animal nutrition

- Official Journal L 304, 27/10/1987 p. 0038
- * Commission Directive 87/238/EEC of 1 April 1987 amending the Annexes to Council Directive 74/63/EEC on undesirable substances and products in animal nutrition
Official Journal L 110, 25/04/1987 p. 0025 - 0026
Finnish special edition: Chapter 3 Volume 23 p. 121
Swedish special edition: Chapter 3 Volume 23 p. 121
CONSLEG - 74L0063 - 22/09/1993 - 41 p.
- Council Directive 97/40/EC of 25 June 1997 amending Directive 93/113/EC concerning the use and marketing of enzymes, micro-organisms and their preparations in animal nutrition
Official Journal L 180, 09/07/1997 p. 0021 - 0021

Existing Chemicals

- Council Regulation 93/793/EEC of 23 March 1993 on the Evaluation and Control of the Risks of Existing Substances
- Commission Regulation 94/91179/EEC of 25 May 1994 Concerning the First List of Priority Substances as Foreseen under Council Regulation 93/793/EEC
- Commission Regulation 94/1488/EEC of 28 June 1994 Laying Down the Principles for Assessment of Risks to Man and the Environment of Existing Substances in Accordance with Council Regulation 93/793/EEC
- Commission Regulation (EC) No 142/97 of 27 January 1997 concerning the delivery of information about certain existing substances as foreseen under Council Regulation (EEC) No 793/93 (Text with EEA relevance)
Official journal NO. L 025, 28/01/1997 P. 0011 - 0012
- Commission Regulation (EC) No 143/97 of 27 January 1997 concerning the third list of priority substances as foreseen under Council Regulation (EEC) No 793/93 (Text with EEA relevance)
Official journal NO. L 025, 28/01/1997 P. 0013 - 0014
- CORRIGENDUM TO:
COMMISSION REGULATION (EC) No 2268/95 of 27 September 1995 concerning the second list of priority substances as foreseen under Council Regulation (EEC) No 793/93
Official Journal L 237, 06/10/1995 p. 0008
Commission Regulation (EC) No 2268/95 of 27 September 1995 concerning the second list of priority substances as foreseen under Council Regulation (EEC) No 793/93
Official journal NO. L 231, 28/09/1995 P. 0018 - 0019

Genetically Modified Micro-organisms (GMOs)

- Council Directive 90/219/EEC of 23 April 1990 on the Contained Use of Genetically Modified Micro-organisms
 - * Commission Directive 94/51/EEC of 7 November 1994 Adapting to Technical Progress Council Directive 90/219/EEC (above)
 - * Council Directive 98/81/EC of 26 October 1998 amending Directive 90/219/EEC on the contained use of genetically modified micro-organisms
- Official Journal L 330 , 05/12/1998 p. 0013 - 0031
- Commission Decision 91/448/EEC of 29 July 1991 Concerning the Guidelines of Classification Referred to in Article 4 of Directive 90/219/EEC
 - * 96/134/EC: Commission Decision of 16 January 1996 amending Decision 91/448/EEC concerning guidelines for classification referred to in Article 4 of Council Directive 90/219/EEC on the contained use of genetically modified micro-organisms (Text with EEA relevance) Official journal NO. L 031, 09/02/1996 P. 0025 - 0027
- Council Directive 90/220/EEC of 23 April 1990 on the Deliberate Release into the Environment of Genetically Modified Organisms
 - * Commission Directive 94/15/EEC Adapting to Technical Progress for the First Time Council Directive 90/220/EEC (above)
- Council Decision 91/596/EEC of 4 November 1991 Concerning the Summary Notification Information Format Referred to in Article 9 of Directive 90/220/EEC (above)
 - * Commission Decision 94/211/EEC of 15 April 1994 Amending Council Decision 91/596/EEC Concerning the Summary Notification Information Format Referred to in Article 9 of Directive 90/220/EEC
- Commission Decision 92/146/EEC of 1 February 1992 Concerning the Summary Notification Information Format Referred to in Article 12 of Council Directive 90/220/EEC (above)
- Commission Decision 93/584/EEC of 22 October 1993 Establishing the Criteria for Simplified Procedures Concerning the Deliberate Release into the Environment of Genetically Modified Organisms
- Commission Decision 94/730/EEC of 4 November 1994 Establishing Simplified Procedures Concerning the Deliberate Release into the Environment of Genetically Modified Plants Pursuant to Article 6(5) of Council Directive 90/220/EEC
 - * 93/572/EEC: Commission Decision of 19 October 1993 concerning the placing on the market of a product containing genetically modified organisms pursuant to Article 13 of Council Directive 90/220/EEC Official journal NO. L 276, 09/11/1993 P. 0016 - 0017
Finnish special edition: Chapter 15 Volume 13 P. 69
Swedish special edition: Chapter 15 Volume 13 P. 69

- * Commission Directive 94/51/EC of 7 November 1994 adapting to technical progress Council Directive 90/219/EEC on the contained use of genetically modified micro-organisms
Official Journal L 297, 18/11/1994 p. 0029 - 0030
Finnish special edition: Chapter 15 Volume 13 p. 248
Swedish special edition: Chapter 15 Volume 13 p. 248

Detergents

- * Council Directive 73/404/EEC of 22 November 1973 on the Approximation of the Laws of the Member States Relating to Detergents
- Council Directive 82/242/EEC of 31 March 1982 on the Approximation of the Laws of the Member States Relating to the Methods of Testing the Biodegradability of Non-ionic Surfactants and Amending Directive 73/404/EEC
- * Council Directive 82/243/EEC of 31 March 1992 Amending Directive 73/405/EEC on the Approximation of the Laws of the Member States Relating to Methods of Testing the Biodegradability of Anionic Surfactants
- * Council Directive 86/94/EEC of 10 March 1986 amending for the second time Directive 73/404/EEC on the approximation of the laws of the Member States relating to detergents
Official Journal L 080, 25/03/1986 p. 0051 - 0051
Finnish special edition: Chapter 13 Volume 15 p. 61
Swedish special edition: Chapter 13 Volume 15 p. 61
CONSLEG - 73L0404 - 25/03/1986 - 9 p.
- Council Directive 86/94/EEC of 10 March 1986 Amending Directive 82/242/EEC
- Council Directive 73/405/EEC of 22 November 1973 on the approximation of the laws of the Member States relating to methods of testing the biodegradability of anionic surfactants
Official Journal L 347, 17/12/1973 p. 0053 - 0063
Greek special edition: Chapter 15 Volume 1 p. 15
Spanish special edition: Chapter 13 Volume 3 p. 108
Portuguese special edition Chapter 13 Volume 3 p. 108
Finnish special edition: Chapter 15 Volume 1 p. 164
Swedish special edition: Chapter 15 Volume 1 p. 164
CONSLEG - 73L0405 - 22/04/1982 - 20 p.

Asbestos

- Council Directive 87/217/EEC of 19 March 1987 on the Prevention and Reduction of Environmental Pollution by Asbestos

Cadmium

- Council Resolution 88/C 30/01 of 25 January 1988 on a Community Action Programme to Combat Environmental Pollution by Cadmium

Screening for lead

- Council Directive 77/312/EEC of 29 March 1977 on Biological Screening of the Population for Lead

Export and Import of Chemicals

- Council Regulation 88/1734/EEC of 16 June 1988 Concerning Export from and Import into the Community of Certain Dangerous Chemicals
- Council Regulation 92/2455/EEC of 23 July 1992 Concerning the Export and Import of Certain Dangerous Chemicals
 - * Commission Regulation 94/41/EEC of 11 January 1994 Amending Annex II to Council Regulation 92/2455/EEC Concerning the Export and Import of Certain Dangerous Chemicals
- Proposal for a Council Regulation Amending for the First Time Annex I to Regulation (EEC) 92/2455 Concerning the Export and Import of Certain Dangerous Chemicals (93/C 112/20 COM(93) 120 final)
 - * Council Regulation (EC) No 3135/94 of 15 December 1994 amending Annex I to Regulation (EEC) No 2455/92 concerning the export and import of certain dangerous chemicals
Official journal NO. L 332, 22/12/1994 P. 0001 - 0003
Finnish special edition: Chapter 11 Volume 33 P. 119
Swedish special edition: Chapter 11 Volume 33 P. 119
 - * Commission Regulation (EC) No 1492/96 of 26 July 1996 amending Annex II and Annex III to Council Regulation (EEC) No 2455/92 concerning the export and import of certain dangerous chemicals
Official journal NO. L 189, 30/07/1996 P. 0019 - 0048
 - * Commission Regulation (EC) No 1237/97 of 27 June 1997 amending Annex II to Council Regulation (EEC) No 2455/92 concerning the export and import of certain dangerous chemicals
Official Journal L 173, 01/07/1997 p. 0037 - 0068
 - * Commission Regulation (EC) No 2247/98 of 13 October 1998 amending Annex II to Council Regulation (EEC) No 2455/92 concerning the export and import of certain dangerous chemicals (Text with EEA relevance)
Official Journal L 282, 20/10/1998 p. 0012 - 0054

Fertilisers

- Council Directive 76/116/EEC of 18 December 1975 on the Approximation of the Laws of the Member States Relating to Fertilisers
 - * Council Directive 88/183/EEC of 22 March 1988 amending Directive 76/116/EEC in respect of fluid fertilisers
Official Journal L 083, 29/03/1988 p. 0033 - 0039
Finnish special edition: Chapter 13 Volume 17 p. 38
Swedish special edition: Chapter 13 Volume 17 p. 38

- * Council Directive 89/284/EEC of 13 April 1989 supplementing and amending Directive 76/116/EEC in respect of the calcium, magnesium, sodium and sulphur content of fertilisers
Official Journal L 111, 22/04/1989 p. 0034 - 0038
Finnish special edition: Chapter 13 Volume 18 p. 229
Swedish special edition: Chapter 13 Volume 18 p. 229
- * Commission Directive 96/28/EC of 10 May 1996 adapting to technical progress Council Directive 76/116/EEC on the approximation of the laws of the Member States relating to fertilisers (Text with EEA relevance)
Official Journal L 140, 13/06/1996 p. 0030 - 0031
- Commission Directive 77/535/EEC of 22 June 1977 on the Approximation of the Laws of the Member States Relating to Methods of Sampling and Analysis for Fertilisers as last amended by Directive 93/1/EEC o Council Directive 89/530/EEC of 18 September 1989 Supplementing and Amending Directive 76/116/EEC in respect of the Trace Elements Boron, Cobalt, Iron, Manganese and Zinc Contained in Fertilisers
- * Commission Directive 89/519/EEC of 1 August 1989 supplementing and amending Directive 77/535/EEC on the approximation of the laws of Member States relating to methods of sampling and analysis for fertilisers
Official Journal L 265, 12/09/1989 p. 0030 - 0047
Finnish special edition: Chapter 13 Volume 19 p. 93
Swedish special edition: Chapter 13 Volume 19 p. 93
- * Commission Directive 87/566/EEC amending Directive 77/535/EEC on the approximation of the laws of the Member States relating to methods of sampling and analysis for fertilisers
Official Journal L 342, 04/12/1987 p. 0032 - 0034
Finnish special edition: Chapter 13 Volume 16 p. 220
Swedish special edition: Chapter 13 Volume 16 p. 220
- * Commission Directive 79/138/EEC of 14 December 1978 amending Directive 77/535/EEC on the approximation of the laws of the Member States relating to methods of sampling and analysis for fertilisers
Official Journal L 039, 14/02/1979 p. 0003 - 0010
Greek special edition: Chapter 3 Volume 24 p. 66
Spanish special edition: Chapter 13 Volume 9 p. 194
Portuguese special edition Chapter 13 Volume 9 p. 194
Finnish special edition: Chapter 13 Volume 9 p. 150
Swedish special edition: Chapter 13 Volume 9 p. 150
- * Commission Directive 93/1/EEC of 21 January 1993 Amending Directive 77/535/EEC on the Approximation of the Laws of the Member States Relating to Methods of Sampling and Analysis for Fertilisers
- * Commission Directive 95/8/EEC of 10 April 1995 Amending Directive 77/535/EEC on the Approximation of the Laws of Member States Relating to Methods of Sampling and Analysis for Fertilisers

(Methods of Analysis for Trace Elements at a Concentration Greater than 10%)

- Council Directive 80/876/EEC of 15 July 1980 on the Approximation of the Laws of the Member States Relating to Straight Ammonium Nitrate Fertilisers of High Nitrogen Content
- Directive 97/63/EC of the European Parliament and of the Council of 24 November 1997 amending Directives 76/116/EEC, 80/876/EEC, 89/284/EEC and 89/530/EEC on the approximation of the laws of the Member States relating to fertilisers

Official Journal L 335, 06/12/1997 p. 0015 - 0016

- Commission Directive 87/94/EEC of 8 December 1986 on the approximation of the laws of the Member States relating to procedures for the control of characteristics of, limits for and resistance to detonation of straight ammonium nitrate fertilisers of high nitrogen content

Official Journal L 038, 07/02/1987 p. 0001 - 0023

Finnish special edition: Chapter 13 Volume 16 p. 112

Swedish special edition: Chapter 13 Volume 16 p. 112

- * Commission Directive 88/126/EEC of 22 December 1987 amending Directive 87/94/EEC on the approximation of the laws of the Member States relating to procedures for the control of characteristics of, limits for and resistance to detonation of straight ammonium nitrate fertilisers of high nitrogen content

Official Journal L 063, 09/03/1988 p. 0012 - 0012

Finnish special edition: Chapter 13 Volume 17 p. 35

Swedish special edition: Chapter 13 Volume 17 p. 35

- * Commission Directive 93/69/EEC of 23 July 1993 adapting to technical progress Council Directive 76/116/EEC on the approximation of the laws of the Member States relating to fertilisers

Official Journal L 185, 28/07/1993 p. 0030 - 0042

Finnish special edition: Chapter 13 Volume 29 p. 3

Swedish special edition: Chapter 13 Volume 29 p. 3

Control of Toxic Chemicals: Scientific Advisory Committee

- Council Directive 78/618/EEC of 28 June 1978 Setting up a Scientific Advisory Committee to examine the Toxicity and Ecotoxicity of Chemical Components

IV. Noise

Motor Vehicles: Sound Levels

- Council Directive 70/157/EEC of 6 February 1970 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Level and the Exhaust System of Motor Vehicles
- * Commission Directive 73/350/EEC of 7 November 1973 Adapting to Technical Progress Directive 70/157/EEC (above)
- * Council Directive 77/212/EEC of 8 March 1977 Amending Directive 70/157/EEC (above)
- * Commission Directive 81/334/EEC of 13 April 1981 Adapting to Technical Progress Directive 70/157/EEC (above)

- * Council Directive 84/424/EEC of 3 September 1984 Amending Directive 70/157/EEC (above)
- * Council Directive 92/97/EEC of 10 November 1992 Amending Directive 70/157/EEC (above)

Motorcycles: Permissible Sound Levels and Exhaust Systems

- Council Directive 78/1015/EEC of 23 November 1978 on the Approximation of the Laws of the Member States on the Permissible Sound Level and Exhaust System of Motorcycles
 - * Council Directive 87/561/EEC of 15 December 1986 Amending Directive 78/1015/EEC (above)
 - * Council Directive 89/235/EEC of 13 March 1989 Amending Directive 78/1015/EEC (above)

Tractors

- Council Directive 74/151/EEC of 4 March 1974 on the Approximation of the Laws of the Member States Relating to Certain Parts and Characteristics of Wheeled Agricultural or Forestry Tractors
- Council Directive 77/311/EEC of 29 March 1977 on the Approximation of the Laws of the Member States Relating to the Driver-perceived Noise Level of Wheeled Agricultural or Forestry Tractors

Aircraft

- Council Directive 80/51/EEC of 20 December 1979 on the Limitation of Noise Emissions from Subsonic Aircraft
 - * Council Directive 83/206/EEC of 21 April 1983 Amending Directive 80/51/EEC (above)
- Council Directive 89/629/EEC of 4 December 1989 on the Limitation of Noise Emissions from Civil Subsonic Jet Aeroplanes
- Council Directive 92/14/EEC of 2 March 1992 on the Limitation of the Operation of Aeroplanes Covered by Part II Chapter 2 Volume 1 of Annex 16 to the Convention on International Civil Aviation, Second Edition (1988)

Construction Plant and Equipment

- Council Directive 79/113/EEC of 19 December 1978 on the Approximation of the Laws of the Member States Relating to the Determination of the Noise Emission of Construction Plant and Equipment Amended by Directive 81/1051/EEC of 7 December 1981
 - * Commission Directive 85/405/EEC of 1 July 1985 Adapting to Technical Progress Council Directive 79/113/EEC (above)
- Council Directive 84/532/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to Common Provisions for Construction Plant and Equipment

Compressors

- Council Directive 84/533/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Power Level of Compressors

Tower Cranes

- Council Directive 84/534/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Power Level of Tower Cranes
 - * Council Directive 87/405/EEC of 25 June 1987 Amending Directive 84/534/EEC (above)

Welding Generators

- Council Directive 84/535/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Power Level of Welding Generators as Amended by Council Directive 85/407/EEC of 11 July 1985
- Council Directive 84/536/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Power Level of Power Generators as Amended by Directive 85/408/EEC of 1 July 1985

Hand-held Concrete Breakers

- Council Directive 84/537/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Power Level of Powered Hand-held Concrete-breakers and Picks

Excavators – Dozers, Loaders

- Council Directive 86/662/EEC of 22 December 1986 on the Limitation of Noise Emitted by Hydraulic Excavators, Rope-operated Excavators, Dozers, Loaders and Excavator-loaders
 - * Council Directive 89/514/EEC of 2 August 1989 Adapting to Technical Progress Council Directive 86/662/EEC (above)
 - * European Parliament and Council Directive 95/127/EC of 29 June 1995 Amending Council Directive 86/662/EEC

Machinery: Health and Safety Requirements

- Council Directive 89/392/EEC of 14 June 1989 on the Approximation of the Laws of the Member States Relating to Machinery
 - * Council Directive 91/368/EEC of 20 June 1991 Amending Directive 89/392/EEC on the Approximation of the Laws of the Member States Relating to Machinery

Lawnmowers: Sound Power Level

- Council Directive 84/538/EEC of 17 September 1984 on the Approximation of the Laws of the Member States Relating to the Permissible Sound Power Level of Lawnmowers
 - * Council Directive 88/181/EEC of 22 March 1988 Amending Directive 84/538/EEC (above)

Household Appliances

- Council Directive 86/594/EEC of 1 December 1986 on Airborne Noise Emitted by Household Appliances

Protection of Workers Exposed to Noise

Council Directive 86/188/EEC of 12 May 1986 on the Protection of Workers from the Risks Related to Exposure to Noise at Work

ANNEX 7: UK - GUIDANCE NOTES FOR THE USE OF INSPECTORS

ANNEX 7A: UK (SCOTLAND) GUIDANCE NOTE ON ROUTINE INSPECTIONS, PLANNED AND UNPLANNED

**GUIDANCE NOTES G1
GUIDANCE NOTES FOR THE USE INSPECTORS**

Routine Inspections, Planned and Unplanned

Notes:

1. The guidance notes are issued as an information source for Inspectors. The guidance notes should not be seen as providing exhaustive information on the investigation of incidents inspectors.
2. Because of the highly technical nature of prescribed processes and the fact that enforcement action may arise from the investigation, investigations will be done by those people:
 - appointed by the Secretary of State under Section X of the Environmental Act Y, for carrying Part X of that Act into effect;
 - appointed by a water authority under Section X of the Environmental Act Y;
 - authorized by the Secretary of State under section X of Regulations X, Y, Z.
3. The Environmental Protection (Applications, Appeals and Registers) Regulations, X, Y, Z, Section X, details the information which shall be contained in a register maintained by an enforcing authority. The aspects of the inspection findings must be filed if they fall within the requirements of Section X:
 - all particulars of an enforcement notice or prohibition notice issued by the enforcing authority
 - particulars of any notice issued by the authority withdrawing a prohibition notice.

Guidance Notes

1. Inspection Frequency

1.1 *At what frequency should inspections be done?*

For IPC processes the inspections should preferably be done at least 4 times per year.

1.2 *When should the frequency be increased?*

As a consequence of:

- polluting potential of the process
- deterioration in the operational performance of the process
- frequency of public complaints or expressions of public concern

1.3 *When should the frequency be decreased?*

Any decision to decrease the inspection frequency should be considered carefully and should be based on:

- the authorized process having a minimal polluting potential
- operational performance of the process to demonstrably high standards

1.4 *Should the prescribed process never be inspected?*

No. Prescribed processes should be inspected every year to provide public assurance that there is no significant environmental impact arising from the process being carried on under the conditions of the authorization. Apart from the inspector obtaining on-site information on the process, procedures and personnel, the operator is paying an annual subsistence fee for which he is sure to demand some return.

1.5 *Should a non-prescribed process ever be inspected?*

A non-prescribed process should be inspected if its operation could affect the operation of a prescribed process or if a potential environmental problem was perceived. Justification of an inspection could be the regulation of the non-prescribed process under non-IPC regulation eg, Act format Z.

1.6 *Who is empowered to carry out routine inspections?*

- a. Persons appointed by the Secretary of State under the conditions of section X of Environmental Act Y;
- b. Persons appointed by a water authority under the conditions of section X of Environmental Act Y;
- c. Persons authorized by the Secretary of State under Section X of Act Z.

2. Pre-arrangements

2.1 *Should the date of the inspection be pre-arranged?*

There are advantages in both pre-arranged and unarranged visits. Pre-arrangement will allow the operator and regulator the opportunity to discuss informally the scope of the inspection and other points. The advantage of an unarranged visit is that the process operation can be seen unadorned.

2.2 *With whom should the inspection be pre-arranged?*

Under the Administration conditions of an authorization, the operator is required to appoint an appropriate person whose responsibility it is to ensure that the operator complies with the limits and conditions of an authorization. This person should be in a position to:

- organize the inspection such that the appropriate personnel are available for discussion or inspection duties;
- arrange for all relevant records, procedures etc. to be available;
- discuss the interaction of other prescribed and non-prescribed processes with the process being inspected;
- provide an up-date of the progress being made in completing any improvement plan discuss possible changes to the prescribed processes;
- act as a contact to ensure the completion of actions arising from the inspection.

2.3 *Should inspections be done without informing or consulting the operator's nominated Person?*

The nominated person may be unavailable because of personal circumstances in which case the nominated deputy should be contacted. The operator should be asked to furnish the names of all nominated deputies.

3. Pre-planning by the Inspector

3.1 *What should the Inspector do/be aware of before arriving for the inspection?*

The inspector should have a clear picture of what he intends to inspect, eg procedures, operation, monitoring equipment, future developments etc.

When arranging the meeting, the inspector should consider informing the company's nominated person on the scope of the inspection.

The inspector should have knowledge of:

- the prescribed process;
- the authorization conditions;
- performance against authorization conditions;
- any recent complaints from public sources or other regulators (this could apply to other prescribed or non-prescribed processes);
- progress against improvement plans;
- progress against the requirements of variation notices;
- information supplied by the operator on the future operation of the process;
- changes to existing legislation, or new legislation, which could affect the prescribed process;
- site environmental performance.

4. Inspection Requirements

4.1 *What should the inspector take on the inspection?*

The inspection requirements include:

- warrant card;
- business card;
- writing material;
- safety equipment; boots, glasses or goggles, helmet, gloves, protective jacket;
- authorization and relevant consent documentation, or parts thereof;
- relevant diagrams or extracts from the application;
- monitoring and analytical results supplied by the operator;
- progress reports on Improvement Plans;
- investigation report into any recent abnormal occurrences;
- details for variation of conditions of the authorization by operator and enforcing authority;
- appropriate sampling equipment;
- proposals by the operator for the future operation of the process;
- an optional extra may be a camera, still or video.

NOTE: Safety Requirement

Because of the nature of this equipment it is almost certain that a permit for its use will be required from the operator of the process .

Every effort should be made to obtain photographic/video evidence as visual evidence can have a greater impact than written evidence.

5. Pre-meeting with Operator's Nominated Person Prior to Inspection

5.1 *Should the inspector have a pre-meeting with the operator's nominated person?*

Yes. When the inspection has been pre-arranged. This pre-meeting should be seen as an integral part of an inspection and should be arranged when the inspection date is agreed.

No. When the inspection date has not been pre-arranged.

5.2 *Where should the pre-meeting be held?*

If at all possible the meeting should be held out with the operating area of the prescribed process. The nominated person's office would seem an obvious choice.

5.3 *Who should be present at the pre-meeting?*

As a minimum, the inspector and nominated person.

The inspector may be accompanied by a colleague from the enforcing authority or from the consulted authority when a joint inspection is being done.

The company may wish to have production or technical personnel present to discuss various aspects of the process prior to the inspection. This should be encouraged.

5.4 *What should be discussed at the pre-meeting?*

The scope of the discussions can be general or detailed dependent upon the objectives of either party.

As a minimum the inspector should:

- describe the objectives of the inspection, eg inspection of abatement systems and appropriate records, inspection of monitoring records, inspection of the operation area etc.;
- discuss changes to existing legislation or impending new legislation which may affect the prescribed process.

The inspector may wish to ascertain:

- progress of actions arising from the previous visit;
- the operational behaviour of the prescribed process since the previous visit;
- future process or plant modifications which may require variation of the authorization conditions;
- progress against improvement plan requirements;
- personnel changes;
- interaction between the prescribed process and other site activities, eg in waste minimization developments, environmental monitoring techniques etc.;
- actions which have been taken to prevent recurrence of an abnormal incident
- capital expenditure proposals;
- capital expenditure proposals.

6. Inspection of Prescribed Process

6.1 *Who should accompany the inspector?*

As a minimum, the company's nominated person. However, it is unlikely that the nominated person will have detailed knowledge of the operational or engineering systems used in the prescribed process. It therefore makes sense that personnel directly managing the prescribed process are available for discussion or direct inspection of the prescribed process.

6.2 *Should the Inspector ever carry out the inspection by himself?*

No (sections X, Y, Z of Health and Safety Act X).

6.3 *What should be inspected?*

The inspector has the powers to inspect any aspect of the prescribed process.

Although not exhaustive the following list illustrates the main areas of inspection:

- the operating plant;
- abatement systems and the associated control and alarm systems;
- control room;
- alarm testing log;
- drain systems;
- sample points and sampling equipment, both liquid and gaseous;
- storage areas;
- analytical laboratory; testing and calibration procedures;
- compliance monitoring results log;
- abnormal incident reporting log;
- public complaints log;
- process operation procedures.

6.4 *Should the inspector speak with supervisors, operators, tradesmen who work on the prescribed process?*

Yes. It is a condition of authorization that all persons whose work is associated with the authorized process are aware of their responsibilities and are trained in carrying on the authorized process. This communication could prove to a rich source of information.

6.5 *Should a complete inspection of the prescribed process be done on every inspection visit?*

Because of the size and complexity of the process it may not be possible to carry out a complete inspection every visit. Although each inspector will have his own routine and each visit may produce an unscheduled inspection topic, every effort should be made to inspect all aspects of the authorized process at least once per year.

6.6 *Can the inspector issue either an enforcement notice or a prohibition notice?*

No. Within Inspectorate X enforcement notices or prohibition notices can only be issued by the Chief Inspector, or in his absence, the Deputy Chief Inspector. The inspector should ensure, at the time of the visit, that the operator is under no doubt that enforcement action will be recommended as a result of particular aspects arising from the visit.

6.7 *What special powers does the inspector have?*

Powers of entry and inspection:

- Powers of entry at any reasonable time, or at any time if there is an immediate risk of serious pollution of the environment.
- Powers to be accompanied by any nominated persons, or a Policeman if the inspector has reasonable cause to expect any serious obstruction in the execution of his duty.
- Power to take with him any equipment or materials required for any purpose for which the power of entry is being exercised.
- Power to make such examination and investigation as is necessary.
- Power to direct that the premises, part of the premises or anything in them be left undisturbed for the purpose of the above examination or investigation.
- Power to take such measurements and photographs and to make such recordings as necessary for the purpose of the above examination or investigation.
- Power to take samples of any articles or substances on the premises and of the air, water or land in, on, or in the vicinity of, the premises.
- Power to allow for the dismantling or testing of any article or substance which has caused or is likely to cause pollution of the environment - in the case of any such article or substance, the taking possession of and retention for the purpose of examining it, preventing its being tampered with or maintaining its availability for use as evidence.
- Power to take statements from any person whom an inspector has reasonable cause to believe to be able to give relevant information .
- Power to require the production of or extraction from any records required to be kept as a condition of authorization or which it is necessary for an inspector to see for the purpose of an examination or investigation - power to require any person to afford him such facilities an assistance as are within that person's control - power to seize and have rendered harmless any article or substance which he believes to be a cause of imminent danger.

Powers of Entry and Inspection.

Powers of entry at any reasonable time to:

- perform any function conferred by the Act;
- determine how this function should be performed;
- determined how provisions of the Act are being complied with;
- carry out inspections, measurements and tests and take away samples as considered appropriate.

By issue of a warrant by a justice of the peace or a sheriff, to enter any land or vessel:

- where there is a right of entry and that right has been refused or that refusal is apprehended;
- that is unoccupied;
- from which the owner is temporarily absent;
- in the case of an emergency;
- or that an application for administration would defeat the object of the entry PROVIDING;
- there is reasonable ground for entry upon the land or vessel for the purpose

for which entry is required.

The justice of the peace or sheriff may authorize entry by force.

The person authorized to enter:

- may take such other persons as may be necessary;
- may take such equipment as may be necessary;
- shall leave the land or vessel effectively secured against trespassers when entry has been made to unoccupied land or vessel or from which the occupier is temporarily absent.

6.8 *Can these powers be exercised during a routine inspection?*

The inspector can use any or all of the powers at any time.

6.9 *What procedure should be followed if the inspector decides to sample an effluent stream?*

The power to take samples is conferred by the conditions of section X, Act Y. If an inspector decides to sample an effluent stream, he/she should:

- inform the company's nominated person or management representative of the reason for sampling. This conversation should be recorded;
- ascertain and record the operating conditions of the authorized process;
- be accompanied by the nominated person or the management representative when the sample is being taken;
- where legal action is a likely consequence and whenever possible, take 1 sample which can be split 3 ways; one to the enforcing authority, one to the operator's representative and one for reference. All samples should be sealed and labelled with all relevant details recorded. (Consideration should be given to the signatures of the inspector and operator's representative being recorded on the label).

The reference sample should be retained by the inspector.

If it is not possible to take 1 sample, take 3 samples, as near as possible to the same time, and label and distribute as above.

7. On- Site Post Inspection Review

7.1 *Should the inspector give the operator's nominated person (and other personnel) feed-back on the inspection?*

Yes, This will allow both sides to discuss the inspection findings and to agree subsequent actions. If the inspector is accompanied by the nominated person and a person responsible for the authorized process, both persons should be informed of the inspection findings. Some of the points may have been discussed during the actual inspection.

7.2 *What information should be given by the inspector?*

Because the inspector may need to reflect on some aspect of the inspection, the feedback can be of a general nature. Agreed actions or requirements can be confirmed and disagreements can be aired.

7.3 *If the inspector is concerned with aspects of the inspection, to whom should this be reported before the inspector leaves the site?*

The inspector should consider meeting the manager with overall responsibility for the operation of the prescribed process.

8. Inspection Report

8.1 *Should an inspection report be prepared?*

Yes, a report should be prepared as soon as practicable after the visit.

8.2 *Is there a particular report format, which should be used?*

Yes, copies of an agreed report format have been sent to all enforcement authorities involved and to Inspectorate X.

8.3 *To whom should the report be sent?*

The Reporting Protocol is detailed in Guidance Note 2.

8.4 *Should the inspection report be filed in the appropriate public information registers?*

Section X, details the information, which shall be contained in a register maintained by an enforcing authority. The inspection report must not be filed in the register but certain aspects of the inspection findings must be filed if they fall within the requirements of Section X:

- all particulars of an enforcement notice or prohibition notice issued by the enforcing authority;
- particulars of any notice issued by the authority withdrawing a prohibition notice;
- all particulars of an enforcement notice or prohibition notice issued by the enforcing authority.

ANNEX 7B: UK (SCOTLAND) - GUIDANCE NOTE ON INCIDENT INVESTIGATIONS

GUIDANCE NOTES G3 GUIDANCE NOTES FOR THE USE OF INSPECTORS

Incident Investigations

1. The guidance notes are issued as an information source for Inspectors. The guidance notes should not be seen as providing exhaustive information on the investigation of incidents inspectors.
2. Because of the highly technical nature of prescribed processes and the fact that enforcement action may arise from the investigation, investigations will be done by those people:
 - appointed by the Secretary of State under Section X of the Environmental Act Y, for carrying Part X of that Act into effect;
 - appointed by a water authority under Section X of the Environmental Act Y;
 - authorised by the Secretary of State under section X of Regulations X, Y, Z.

Guidance Notes

1. Notification of the Need to Carry Out an Investigation
 - 1.1 *Who is empowered to carry out investigations:*
 - a. persons appointed by the Secretary of State under the conditions of section X of Environmental Act Y;
 - b. persons appointed by an authority under the conditions of section X of Environmental Act Y;
 - c. persons authorised by the Secretary of State under section X of Act Z..
 - 1.2 *When should an investigation be done?*

In the event of:

 - a breach of a condition of authorisation;
 - an abnormal incident;
 - a public complaint;
 - information received from a consulted authority or statutory consultee;
 - any other condition under the terms of section 17, Environmental Act Y.

1.3 *How would the inspector be informed of the need to carry out an investigation?*

By normal means of communication from the operator, telephone, fax, letter, emergency services or a member of the public. It is to be hoped that the inspector is informed of the need for a non-routine inspection by means other than an announcement by TV, radio or newspaper .

Each inspector should be aware of the name and telephone number of his contacts within other enforcement authorities.

Inspectorate X Telephone numbers

-
-
-
-
-

Enforcement Authority Y Telephone numbers:

-
-
-
-
-

1.4 *Who should the inspector contact when he is made aware of the need for an investigation?*

The inspector should make every effort to inform the Company's nominated person or other management personnel, the consulted authority or those statutory consultees whose interests may be affected by the reason for the non-routine inspection.

Section X also enables the inspector to be accompanied by a constable if the inspector has reasonable cause to apprehend any serious obstruction of his duty.

1.5 *What should the inspector take to the investigation site?*

The inspector should take:

- warrant card;
- writing material;
- safety equipment; boots, glasses or goggles, helmet, gloves, protective jacket;
- appropriate sampling equipment;

- camera, still and/or video, but because of safety considerations, permission to use this equipment while on site must be obtained from the operator. Every effort should be made to obtain photographic or video evidence of an incident investigation.

A mobile telephone may be a worthwhile extra but permission to use this equipment while on site must be obtained from the operator.

It may be worth having an "emergency scramble bag" prepared ready for use.

1.6 When can an investigation be done?

Anytime, subject to the terms of section X, Environmental Act Y and consideration of the Health and Safety Act X.

2. Arrival at Operator's Premises

It is highly unlikely that any two incidents will be exactly similar. The following information should be seen as guidelines rather than exhaustive.

2.1 Investigation As A Result Of A Decision Taken By The Regulator eg:

- exceedance of a condition of authorisation
- a public complaint
- information received from a consulted authority or statutory consultees
- information received from an operator of a transient or completed abnormal incident

2.1.1 *Who should be contacted?*

The people to be contacted will depend on the reason for the investigation. For an investigation which may have been pre-arranged with the operator, the Company's nominated person, or in his absence his deputy or manager responsible for the operation of the prescribed process .

Safety Requirement

Under no circumstances should an inspector proceed to the locus of the investigation, or allowing anyone accompanying him to so do, without being accompanied by responsible company personnel.

2.1.2 *What identification should be shown?*

The inspector should show his warrant card. All other people involved with the inspector in the visit should have means of identifying their status.

2.1.3 *What immediate action should be taken?*

The immediate action will depend on the nature of the investigation.

For an investigation into a breach of condition, public complaint or information received from the consulted authority or a statutory consultee, the inspector should ensure:

- the facts of the investigation are correct;
- the relevant people necessary for the pursuance of the investigation have been contacted;
- provision has been made to visit the site of the prescribed process.

For an investigation into a transient or completed abnormal incident, in addition to those points mentioned above, the inspector should ascertain:

- the cause of the incident;
- the duration of the incident;
- the pollution potential of the incident;
- the actions taken by the operator;
- the operational status of the prescribed process.

2.1.4 *Who should accompany the inspector during an investigation?*

Preferably the company's nominated person and a manager directly associated with the process. As a minimum, a manager directly associated with the process.

2.1.5 *Should the inspector carry out the investigation unaccompanied?*

Safety Requirement

No. Under no circumstances should an inspector carry out, or permit to be carried out by a colleague or representative of the consulted authority or statutory consultees, an inspection without being accompanied by company personnel.

2.1.6 *What equipment can the inspector take on site?*

The inspector may take with him any equipment or materials required for any purpose for which power of entry is being exercised (See Section X, Environmental Act Y).

Safety Requirement

If electrically operated equipment is taken on site, a permit for its use may be required from the operator.

2.1.7 *When should the investigation start?*

As soon as the relevant personnel and facts are assembled.

2.2 Investigation During an On-Going Emergency

2.2.1 *Who should be contacted?*

For an investigation into an on-going incident, the inspector may need to meet, or make arrangements to meet, representatives of the consulted authority, statutory consultees and, in certain circumstances, the police. The inspector should contact the Company's nominated person or a manager responsible for the operation of the prescribed process, if at all possible before leaving for the visit.

Safety Requirement

Under no circumstances should an inspector proceed to the location of the prescribed process, or allow any consulted authority, statutory consultee or police representative to proceed to the location of the prescribed process without being accompanied by responsible company personnel. This is a safety requirement.

2.2.2 *What identification should be shown?*

The inspector should show his warrant card. All other people involved with the inspector in the visit should have means of identifying their status.

The initial identification may be required by security personnel. The inspector may have to use these personnel to contact other company representatives.

2.2.3 *What immediate action should be taken?*

The immediate action will depend upon the nature of the investigation.

The investigation may have arisen because of a serious upset with the operation of the prescribed process. If the emergency is continuing, the inspector should use great tact in ascertaining the reasons for the emergency particularly as emotions can be high because of the nature of the incident or the scantiness of the information which is available to company personnel. Wherever possible, the inspector should deal solely with the Company's nominated person.

On arrival at site for the investigation of an emergency situation, the inspector should ascertain:

- what has occurred with the operation of the process;
- what is the pollution potential of the event;
- what actions have been taken to prevent or minimize pollution of the environment;
- if the on-site and/or off-site emergency action plans have been initiated;
- who the company has contacted;

- whether representatives of the consulted authority or statutory consultees are on site;
- if it is safe to proceed to the location of the prescribed process.

2.2.4 *Who should accompany the inspector during an investigation?*

Preferably the company's nominated person and a manager directly associated with the process. As a minimum, a manager directly associated with the process.

The representatives of the consulted authority, statutory consultees, appropriate sampling personnel (and police, if necessary) should accompany the inspector.

2.2.5 *Should the inspector carry out the investigation unaccompanied?*

No. Under no circumstances should an inspector carry out, or permit to be carried out by a colleague or representatives of the consulted authority or statutory consultees, an inspection without being accompanied by company personnel. This is a safety requirement.

2.2.6 *What equipment can the inspector take on site?*

The inspector may take with him any equipment or materials required for any purpose for which the power of entry is being exercised, (See Section X, Environmental Act Y).

Safety requirement. If electrically operated equipment is taken on site, a permit for its use may be required from the operator of the process.

2.2.7 *When should the investigation start?*

In the investigation into an emergency, as soon as the company contact has stated that it is safe to proceed to location of the prescribed process. However, it is possible that some relevant information can be obtained before this declaration of safe passage.

Important Note

During an on-going incident, Company and Emergency Services resources will be deployed to bring the incident to a close. It is important that the inspector pays full regards to the work being carried out by Company personnel before starting the investigation.

3. Investigation

3.1 *What should be investigated?*

Whatever part of the authorised process has resulted in a breach of the authorisation conditions and any other areas of concern.

3.2 *How detailed should the investigation be?*

Thoroughly the inspector should undertake whatever examinations and investigations are considered necessary to determine whether or not the operator is in breach of the conditions of the authorisation. The inspector may direct that the premises or the part of the process being inspected be left undisturbed for so long as is reasonably necessary. (See Section X1, Environmental Act Y).

3.3 *What evidence should be gathered?*

The inspector may take measurements and photographs and make such recordings as he considers necessary for the purpose of any examination or investigation. (See Section X2, Environmental Act Y). The inspector may take samples of any articles or substances found in or on the premises and of the air, water or land in, on, or in the vicinity of the premises (see Section X3, Environmental Act Y).

If the inspector has reason to believe that any article or substance, found in or on the premises, has caused or is likely to cause pollution of the environment, the inspector may cause it to be dismantled or subject it to any process or test. The inspector should not damage or destroy the article or substance unless this is necessary (see Section X4, Environmental Act Y) .

If a person present on or having responsibilities for the premises, expresses a wish to be present at the time of dismantling or test, the inspector may not dismantle or test any article or substances other than in the presence of that person (see Section X5, Environmental Act Y).

Before exercising the power to dismantle or test any article or substance, the inspector must consult such persons as appear to him appropriate for the purpose of ascertaining what dangers, if any, there may be in dismantling or testing any article or substance (see Section X, Environmental Act Y).

The inspector may take possession of, and detain for as long as is necessary, any article or substance, either for the purposes of examination and test to ensure that it is not tampered with before his investigation is completed or to ensure that it is available as evidence in any subsequent proceedings (see Section X6, Environmental Act Y). The inspector must leave a notice with a responsible person on the premises, or fixed in a conspicuous position, giving particulars of that article or substance sufficient to identify it and stating that he has taken possession of it.

Where practicable, the inspector must also leave a portion of the sample with a responsible person at the premises, marked in a manner sufficient to identify it (see Section X7, Environmental Act Y).

The inspector may require, for the purpose of inspection or copying, the production of records, including computerised records which are required to be kept by the operator or are necessary for the inspector to see for the purpose of an investigation or examination (see Section X8, Environmental Act Y). Where such records are inspected or copied, the Company's nominated person, his deputy or a manager associated with the process shall sign the records to validate that the records are a true reflection of the events leading up to the incident.

The inspector may demand such facilities and assistance as are necessary to enable the inspector to exercise any of the powers conferred on him by section (see Section X9, Environmental Act Y).

3.4 *Can any other non-prescribed or prescribed process be examined or investigated?*

Yes, by virtue of the powers conferred on the inspector by Section X, Environmental Act Y and Section Y, Act Z.

4. Interviews

4.1 *Who should be interviewed?*

The inspector may question any person who may have information relevant to the investigations (see Section X10, Environmental Act Y).

4.2 *Who should be present at the interview?*

The inspector and any other person appointed by the Secretary of State under the conditions of section X11, Environmental Act Y or appointed by the water authority under the conditions of section X12, Environmental Act Y .

Section X13, Environmental Act Y gives the inspector the power to require someone to answer questions in the absence of persons other than a person "nominated to be present and any person whom the inspector may allow to be present". The provision does not expressly provide that the witness may nominate someone to be present, but when the sub-section is read as a whole it would appear that this is the intention that lies behind. Hence it would be inappropriate for the inspector to refuse the witness's nomination.

4.3 *How should the interview be conducted?*

The interview should be conducted in privacy and the inspector should keep a detailed note of the proceedings (section 4.5). The questions should be phrased to elicit a detailed reply rather than a "yes/no" response and the inspector should attempt to ascertain:

- the person's involvement
- the action taken by the person before, during or after the incident
- what the person saw or heard before, during or after the incident

The witness may refuse to answer a question put to him by the inspector under Section X14 of Environmental Act Y. Section 23(1) of the same Act makes it an offence for anyone to fail to comply, without reasonable excuse, with any requirement imposed under Section. Thus any failure to answer a question, without reasonable excuse, would amount to an offence under Section Y. By virtue of Section Z, the offence carries a penalty, on summary conviction, of a fine not exceeding the statutory maximum (which presently stands at Euro.

The admissibility of the witness' evidence is determined by the test of fairness; was the evidence fairly obtained? Whether or not a caution is given is simply one factor to be looked at when determining the question of fairness. The caution should not be used in every case without care and forethought simply to avoid any accusation of entrapment. There is no need to caution all witnesses before interviewing them. Once suspicion has focused on an individual, there is authority to the effect that he should be cautioned before he is asked any more questions.

The caution can be given by saying:

"I am required to investigate this incident in order to find out what happened. You are not obliged to say anything but anything you do say will be recorded and may be used in evidence."

Any answer given by you in the course of this interview shall not be admissible in evidence in any subsequent criminal proceedings against you (see Section X, Environmental Act Y).

Note: Inspectorate X and Enforcement Authority Y may wish to consider issuing copies of the above statements to inspectors.

No person being interviewed is compelled to produce any document, which the person is entitled to withhold on grounds of legal professional privilege. (See Section X, Environmental Act Y).

4.4 *When should the interview be done?*

Before holding interviews, the inspector should:

- visit the scene of the incident;
- obtain as much information as possible by observation, discussion and inspection of relevant records.

The interview should be done as quickly as is practicable, while the events are fresh, but not before the inspector has prepared his brief.

4.5 *Should the interviewees be asked to sign their statements?*

Yes, the inspector should ask the person to sign a declaration of the truth of his answers (see Section environmental law Y. This is not an essential requirement of Scottish Law but if the person declines to sign, this fact should be recorded by the Inspector in the presence of the person.

4.6 *Who should be given a copy of the statement?*

The inspector should retain the master copy. A copy should be given to the person interviewed and to the inspector's colleagues. To prevent information leakage and to ensure the privacy of the person is not breached, the inspector should copy the documents.

5. Reports

5.1 *Should the inspector provide feed-back to the operator before he leaves the premises?*

Yes, if requested, but the feed-back should be brief and verbal, preferably given to the company's nominated person and should not define any conclusions or recommendations.

5.2 *To whom should the inspector contact when he returns to his office?*

To his line manager, those colleagues to whom the inspector considers the incident could be of interest and, if applicable, the consulted authority and relevant statutory consultees.

The alacrity and detail of the report will depend on the nature of the investigation.

5.3 *How soon should the investigation report be prepared?*

As expeditiously as possible.

5.4 *To whom should the report be sent?*

The report should be distributed to:

- the line manager;
- the director of the river purification authority and/or the Chief Inspector;
- relevant statutory consultees.

The report should not be sent to the operator. Consideration should be given to circulating the report as "confidential".

5.5 *What could be the result of the report's findings?*

The enforcing authority may issue:

- a variation notice;
- an enforcement notice;
- a prohibition notice.

The ultimate result could be prosecution.

6. Dealing with the media

6.1 If you are approached by a media representative for an interview, information, comment etc. which should you do?

Inspectorate X: All media requests must be directed to The Office Information Directorate, where it will be dealt with by the press office.

Under no circumstances should the inspector provide information on the incident to media representatives without prior permission from the press office.

The press office provides a continuous 24-hour service. In normal working hours, inspectors can call:

| | |
|-------------|-------------------------|
| Ms. Media 1 | telephone number: |
| Mr. Media 1 | telephone number: |
| Mr. Media 2 | telephone number: |

Outwith normal working hours, inspectors should call Mr. I.M. Portant, who will provide the home telephone for the Office Information Directorate duty press officer.

Water Authority: Each Water Authority has its own procedure, which should be known to all inspectors of the Water Authority.

Each Water Authority has a 24-hour pollution emergency service through which the on-duty inspector can be contacted.

The current emergency telephone numbers are:

| | |
|---------------|-------------------------|
| E. Mergency | telephone number: |
| C. atastrophe | telephone number: |
| E.T. Cetera | telephone number: |

1. Inspectorate X and Enforcement Authority Y inspectors should know the emergency telephone numbers they are required to contact.

ANNEX 7C: UK (SCOTLAND)- GUIDANCE NOTE ON INSPECTION AND REPORTING PROTOCOLS

GUIDANCE NOTES G2 GUIDANCE NOTES FOR THE USE INSPECTORS

Inspection and Reporting Protocols

1. The guidance notes are issued as an information source for Inspectors. The guidance notes should not be seen as providing exhaustive information on the investigation of incidents inspectors.
2. Because of the highly technical nature of prescribed processes and the fact that enforcement action may arise from the investigation, investigations will be done by those people:
 - appointed by the Secretary of State under Section X of the Environmental Act Y, for carrying Part X of that Act into effect;
 - appointed by a water authority under Section X of the Environmental Act Y;
 - authorized by the Secretary of State under section X of Regulations X, Y, Z.
3. The Environmental Protection (Applications, Appeals and Registers) Regulations, X, Y, Z, Section X, details the information which shall be contained in a register maintained by an enforcing authority. The inspection report must not be filed in the register but certain aspects of the inspection findings must be filed if they fall within the requirements of Section X:
 - all particulars of an enforcement notice or prohibition notice issued by the enforcing authority;
 - particulars of any notice issued by the authority withdrawing a prohibition notice

Inspection and Reporting Protocols

The inspection protocol/for inspections will be:

Inspection Report

Premises:

Authorized Process:

Authorization No:

Inspector X:

Inspector Y:

Date:

Personnel Visited

Copies of Report:

Inspector X:
Inspector Y:
Company's Nominated Person:
Others

Authorized Process

Operational Status: (Product; Process Control System; Rate)

The report should include:

- the operational status in terms of:
 - * product being made
 - * process being carried on
 - * operational rate
- the status of the process control system in terms of:
 - * whether the system is operating as defined in the application/authorization
 - * split operation; part manual, part automatic.

Comments

This part should be used to record:

- agreed actions and time scale for completion;
- actions requested by the Inspector(s) and being considered (or otherwise) by the operator and time scale;
- areas of concern discussed during the visit.

Abatement Equipment: (Equipment Type; Control Monitoring and Alarm Systems; Associated Effluent Sampling Equipment; On-Site Inspection)

The report should cover:

- the equipment type:
 - * whether as specified by the operator's application
 - * the abatement operation being done (effluent being treated and status of the equipment)
- associated effluent sampling equipment:
 - * whether as specified by the operator's application,
 - * location,
 - * operational status;
- control system:
 - * whether as specified by the operator's application, operational status;
- alarm systems:
 - * whether as specified by the operator's application, operational status, examination of installed recorders, flowcharts;

- monitoring systems
 - * whether as specified by the operator's application operational status,
 - * access,
 - * examination of installed recorders, flowcharts

(NB: Operators of prescribed processes should have checking and testing procedures for alarm and monitoring systems. Inspectors should refer to the testing records to ensure operator compliance with the stated procedures)

Comments (As Operational Status)

Records Inspected: (Training; Maintenance; Operating Emissions; Abnormal Occurrence Public Complaints; Continuous Monitors)

Training records should include:

- recorded training for all personnel involved with prescribed process;
- effectiveness of the trainee's performance in the training areas;
- pre-set periods for recorded training;

Maintenance records should include:

- records of planned maintenance inspections on plant and buildings;
- names of contractors doing the maintenance (if applicable)

Operating records should include:

- availability of operating manuals;
- pre-set periods of review;
- on-the-job assessment of operating methods at pre-set intervals;
- communication system for effecting changes and monitoring the result of changes.

Emission records should include:

- results of routine sampling and analyses as prescribed by authorization;
- reasons for off-specification results and subsequent corrective action;
- sample source;
- sample and test method;

Abnormal occurrence records should include:

- description of the occurrences.
- the frequency of occurrences;
- the source(s) of occurrences;
- the duration;
- the assessment of damage to the environment;
- actions taken to prevent recurrence.

Public complaints records should include:

- the complainants;
- the number of complaints;
- the type of complaint;
- the outcome of the complaint.

Records on continuous monitors should include:

- type and test method employed;
- location of the equipment;
- testing regime of the equipment;
- incidence of failure and subsequent corrective action;
- back-up facilities in the event of failure.

Comments (As Operational Status)

Waste Minimization: (Status; Progress)

Waste minimization plans should include:

- definition of waste streams, quality and quantity;
- recorded plans for waste reduction and statement of achievement;
- energy conservation schemes and recorded achievements.

Comments (As Operational Status)

Plans: (Status; Progress)

The plans agreed between Regulator and operator should be reviewed and must include:

- progress being made in:
 - upgrading the process
 - record keeping
 - waste minimization
 - installing on-line monitors

Comments: (As Operational Status)

Other comments

Signed:

Date:

additional sheets if required)
(* delete as necessary)

Statements Taken by Inspectorate X/Enforcement Authority Y *: (Statement must be attached to this report and signed by the witness)
(* delete as necessary)

Name:
Position:
Date:
Time:
People Present:
Signature of Witness:

Name:
Position:
Date:
Time:
People Present:
Signature of Witness:

Name:
Position:
Date:
Time:
People Present:
Signature of Witness:

Post Incident Report:

Incident Costs

An environmental incident may lead to a submission of the facts to the Fiscal Procurator.

The attached note, Environmental Criminal Law and Compensation Orders, prepared by Office X, discusses the legal aspects of a possible compensation order.

Annex 2 of the note defines the environmental and costs information, which should be included in the submission to the Fiscal Procurator. The incident investigation report will form the basis of the environmental information.

Paragraph 3 of Annex 2 describes the costs, which could be incurred as a result of the incident.

ANNEX 8: Inspection Report (Portugal)

**MINISTÉRIO DO AMBIENTE
INSPECÇÃO-GERAL DO AMBIENTE**

INSPECTION REPORT _____/99

Date of Inspection ___/___/___ Time _____

Date of Report ___/___/___

Installation _____

—

Register Number _____

Site Location

Village _____

Parish _____

Municipality _____

Corporate Address:

Village _____

Parish _____

Municipality _____

Telephone/ Site Nr: _____ Fax / Site_Nr: _____

Contact/Site: _____

Owner of Activity:

Name: _____

—

Home
address: _____

Identity
Card: _____

Administrative and Fiscal Information:

—

—

Legal Status:

—

—

Sector of activity:

—

Official Register no of sector: _____
Daily working hours: _____
Yearly working period: _____
No. of employees: _____

Nature of main raw materials and annual quantities processed:

—

—

—

Brief description of process:

—

—

—

—

—

Category and purpose of the process, main products, daily and yearly production:

—

—

Permit for WWTP: Yes No No: and Deadline

Copy received:

Permit to discharge to
municipal sewerage:

Copy received:

Self monitoring as
described in permit::

Copy received:

Register for Solid wastes under official form: Yes No

Register for Solid wastes according to
existing solid wastes:

Appropriate separation of solid wastes:

Adequate storage arrangements for solid
wastes:

Authorisations for waste minimisation
and final disposal of solid wastes:

Authorisations for transport of solid wastes

Energy consumption, different sources, yearly values:

—

—

The Inspector for Environment

Contributors to this document include:

Mr Alfred Hammler, Amt der Steiermärkischen Landesregierung, Austria

Mr Peter Schryvers, AMINAL, Flanders, Belgium

Mr Gudmund Nielsen, Danish EPA, Denmark

Mr Erkki Kantola, Lapland Regional Environment Centre, Finland

Mr Jean François Guerin, Ministry of the Environment, France

Mr Helmut Kruber, Ministerium für Umwelt, Raumordnung und Landwirtschaft
des Landes Nordrhein-Westfalen, Germany

Ms Katerina Iacovidou, Ministry of Environment, Physical Planning and Public
Works, Greece

Mr Frank Ryan, Irish EPA, Ireland

Mr Giancarlo Boeri, National Environment Agency, Italy

Mr Pierre Dornseiffer, Administration for the Environment, Luxembourg

Mr Rob Glaser, Inspectorate General for the Environment, The Netherlands

Ms Ana Magro e Silva, Inspectorate General for the Environment, Portugal

Mr Miguel Méndez Jiménez, Regional Environment Ministry of Andalusia, Spain

Ms Inga Birgitta Larsson, Swedish Environmental Protection Agency, Sweden

Mr Ken MacDonald, Scottish EPA, United Kingdom