



ENVIRONMENT  
AGENCY



# Regional Environmental Protection Directory

S o u t h e r n   R e g i o n

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## INTRODUCTION

The Environment Agency was formed in April 1996 and is one of the most powerful environmental regulators in the world. It has a far-reaching vision of a better environment for present and future generations.

The Agency is charged with the duty to look after land, air and water and it exists to provide high-quality environmental protection and improvement. It is a non-departmental public body sponsored by the Department of the Environment, Transport and the Regions (DETR), Ministry of Agriculture Fisheries and Food (MAFF) and the Welsh Office.

The Southern Region has Area Offices in Kent, Sussex and Hampshire and the Isle of Wight, and each has published a Directory which is available as a separate document.

This Directory describes the activities of the Regional Environmental Protection Department based at Worthing. This department, along with Water Management, provides the key technical services covering the Region. Other departments which are organised regionally are support services such as Finance, Personnel, Legal, Facilities and Services and Public Relations. The Region is led by Regional General Manager, David Jordan, who is responsible for each of the departments and the Areas.

The work of the Environmental Protection Department and its relationship with our Head Office based at Bristol and each of the Areas can be quite complex. Therefore, the purpose of this document is to explain how the Region complements the work of the Areas and our Head Office.

The Environmental Protection Department has two key aims. The first is to oversee policy implementation in each of the Areas within the Region and across the rest of the country, in co-operation with other Regions. We do this by ensuring that policies are delivered consistently. This is done by the Regional Heads of Function in Environmental Protection, namely Waste Management and Regulation, Water Quality, Land Quality, Process Industry Regulation and Radioactive Substances Regulation. We also have close connections with Functions within Water Management such as Conservation and Water Resources.

The second aspect of our work is to ensure the strategic planning of the Agency takes local needs into account. Area staff are guided by the Area Environment Groups, which are non-statutory bodies of independent individuals. Also, through our Local Environment Agency Plans (LEAPS), we are building a picture of the state of the environment locally to ensure that our policies are appropriate. At the Regional level we have a statutory Regional Environment Protection Advisory Committee (REPAC),



made up of appointed members of the community and local authorities which advise the Agency on its proposed policy and planning initiatives.

We hope this Directory will be of interest and create a greater understanding of how we operate and that it goes some way to explaining the inter-relationship of issues. If you have any queries about the service provided by the Environment Agency please contact our Customer Services Team in the Area where you live or work. These are listed on the back of this Directory.



A handwritten signature in dark ink, appearing to read 'A. Tingley', written over a set of horizontal lines.

Dr Arthur Tingley,  
Regional Environmental Protection Manager

## **Regional Advisory Panel (RAP)**

The RAP consists of 7 members which include the Regional General Manager, Regional Water Manager and Regional Environmental Protection Manager. The Chairman is appointed from the Agency's Board Members and acts as Southern Region's Board Representative. The Chairmen of the three regional committees complete the membership.

The Regional Chairman and Board Representative is Mr Tony Rodgers.

## **Regional Environment Protection Advisory Committee (REPAC)**

The REPAC consists of 21 members appointed following public advertisements and consultation with interested parties. Members are appointed for their expertise in specific areas; such as regulatory (those regulated by the Agency); land and air; environment; local authority. Current members are associated with organisations such as Brett Gravel; Southern Water; English Nature; RSPB; Aylesford Newsprint; National Farmers Union; Smithkline Beecham and Local Authorities. The Chairman of the Regional Flood Defence Committee and the Regional Fisheries Ecology and Recreation Advisory Committee complete the membership. Appointments are made on a rolling programme of one, two or three years.

The Chairman of REPAC is Mr Tom Crossett.

# Southern Region Committees

## **RAP** REGIONAL ADVISORY PANEL

Communication link between Board, Region and Committees  
Offering advice to the Regional General Manager

### **RFDC** REGIONAL FLOOD DEFENCE COMMITTEE

Responsible for discharge of the Agency's Flood Defence Functions in the Region including:

The determination of a 3year Medium Term Plan

Preparation of an annual programme of maintenance and improvements to existing works  
Provision and operation of Flood warning service

### **REPAC** REGIONAL ENVIRONMENT PROTECTION ADVISORY COMMITTEE

Advice to the Agency on all of its functions in the Region, in particular:

Pollution Prevention & Control  
Water Resource Management  
Sustainable Development

### **RFERAC** REGIONAL FISHERIES, ECOLOGY & RECREATION ADVISORY COMMITTEE

Offering advice to the Agency on the manner in which it discharges its duty to maintain, improve and develop the salmon, trout, eel, freshwater and sea fisheries as well as recreation, navigation and relevant conservation issues in the Region.

### **LFDCX3** LOCAL FLOOD DEFENCE COMMITTEE

Hampshire & Isle of Wight  
Kent  
Sussex

### **AEGX4** AREA ENVIRONMENT GROUP

Isle of Wight  
Hampshire  
Kent  
Sussex  
Multi functional advice on local service delivery

### **HORAC** HARBOUR OF RYE ADVISORY COMMITTEE

Offering advice to the Agency on any matter affecting the interests of users of the Harbour, especially the provision or improvement of any service or facility.

## Key Southern Region Statistics

Area:	10979km <sup>2</sup>
Population:	4.6 million
Sites of Special Scientific Interest:	378
Length of coastline:	1124km
Designated Bathing Waters:	69
Annual mean rainfall:	780mm
Discharge consents:	16697
IPC regulated sites and processes:	122
Sites using, storing, or disposing of radioactive materials:	438
Nuclear sites and processes:	2
Licensed waste management facilities:	627
Registered Waste Carriers:	8031
Special Waste Movements:	7600
Length of river, canal and estuary:	2583.7km
Water Quality sampling points:	2700
Samples taken annually for Water Quality purposes:	25,000

## REGIONAL ENVIRONMENTAL PROTECTION

Staff in the Area offices of the Environment Agency carry out environmental licensing, compliance assessment, environmental monitoring and the other operational day to day tasks aimed at protecting the environment.

To ensure these tasks are carried out consistently in all the Regions, a national Policy Framework is required for guidance. Regional Environmental Protection staff represent the interests of the Region at National level, and are a link between Head Office and Areas. They plan and develop the implementation of national policies in conjunction with Areas. This helps to ensure consistent policy development. Once policy is adopted the Regional Environmental Protection staff work to help Areas achieve consistent implementation.



*Potential industrial pollution*

Regional Environmental Protection is organised into six Functions, some of which are grouped:

- Process Industries Regulation
- Radioactive Substances Regulation
- Water Quality
- Waste Management and Regulation
- Environmental Surveillance
- Land Quality



*Industrial discharge*



# MANAGEMENT TEAM

**Arthur Tingley**



**Regional  
Environmental  
Protection Manager**

**Lisa Guilel**



**Environmental  
Protection  
Group Secretary**

**Jill Child**



**Secretary to Regional  
Environmental  
Protection Manager**

**Bob Edmunds  
Regional Manager**



**Water Quality**

**Chris McDonald  
Regional Manager**



**Process  
Industries and  
Radioactive  
Substances  
Regulation**

**Bob Mead  
Regional Manager**



**Environmental  
Surveillance**

**Mike Baker  
Regional Manager**



**Waste  
Management  
and Land  
Quality**



# Process Industry Regulation and Radioactive Substances Regulation (PIR/RSR)

**Chris McDonald**



**Regional Manager  
of Process Industry  
and Radioactive  
Substances  
Regulation**

**Allan Asifworth**



**Regional PIR/RSR  
Regulatory  
Specialist**

**Richard Chase**



**Regional PIR/RSR  
Regulatory  
Specialist**

**Jane Longman**



**Regional  
PIR/RSR  
Monitoring  
Specialist**

**Catherine Hadfield**



**Regional  
PIR/RSR Support  
Team Leader**

# **PROCESS INDUSTRY REGULATION AND RADIOACTIVE SUBSTANCES REGULATION**

## **Integrated Pollution Control (IPC)**

The Environment Agency is the statutory authority in England and Wales for regulating the largest and most complex industrial processes. This duty involves permitting, enforcing, inspecting and monitoring under the Environmental Protection Act 1990 (EPA90) Part 1.

### **Assessing Environmental Harm**

The Agency ensures that pollution, particularly from industrial sources, is prevented or that it does not reach unacceptable levels, as required under national legislation. The Agency also enforces anti-pollution aspects of European legislation and international environmental treaties.

This involves:

- gathering and appraising data and information
- undertaking assessments based on the data
- assessing environmental harm, using informed judgement, and acting on this assessment

The Agency regulates emissions from industry in England and Wales, utilising the concept of Integrated Pollution Control (IPC). EPA90 requires those wishing to operate an industrial process to apply for authorisation from the Environment Agency.

The Agency ensures the commitments made in the application, and the conditions placed in the authorisation, satisfy the objectives of the Act, which include:

- best available techniques not entailing excessive cost (BATNEEC) should be used to ensure that prescribed and other substances which are necessarily released do not cause harm.
- the BATNEEC principle is to be used to ensure that the best practicable environmental option (BPEO) is adopted. BPEO is selected to ensure the effects of any releases to air, land and water are minimised in the context of their effect on the environment as a whole.

The determination of what constitutes the BATNEEC and the BPEO in each case is complex and site specific. The Agency publishes technical guidance for inspectors and operators to ensure a consistent approach when making these determinations.

In addition to the characteristics of the individual process cited in the application for authorisation, the Agency assesses the potential combined effects of several authorised processes in the same vicinity.

Following authorisation, the Agency undertakes inspection and assessment to ensure the authorisation conditions are being complied with. Inspections are also carried out following reports of pollution incidents. If an inspector discovers a breach of authorisation conditions, an Enforcement Notice may be served under the EPA90. Where there is an imminent risk that the environment may be seriously polluted, a Prohibition Notice is served and the Agency will prosecute when necessary.

## **Monitoring**

The authorisation requires the operator to monitor releases and report the results:

- as an element of regulatory control
- to provide information to the public

The Agency also commissions independent monitoring to ensure that operators' results are valid by:

- routine monitoring
- ad-hoc or reactive monitoring
- site surveys and investigations

## **Radioactive Substances Regulation**

The Environment Agency is the regulator in England and Wales under the Radioactive Substances Act 1993 (RSA93). This Act is concerned with the keeping, use and disposal of radioactive substances. This duty involves assessing, authorising, inspecting and enforcing under the relevant legislation.

## **Assessing the Hazards**

Radioactive substances are present in the environment as a result of natural processes and man's technological developments. The Agency's objective is to regulate the use of radioactive substances to protect the public and the environment. Our role is to combine an understanding of the hazards, and their associated consequences, with a detailed knowledge of how they can be eliminated, or controlled and managed, and to apply this expertise to each situation.

## **Permissions**

The RSA93 requires people whose activities involve radioactive substances to apply for permission, which takes the form of:

- a certificate of authorisation for the accumulation and disposal of radioactive waste, e.g. from hospitals, research organisations; and/or
- a certificate of registration for keeping and using radioactive materials, e.g. industrial process flow measurement equipment, density gauges.

The Agency assesses proposals to keep and use radioactive substances and to accumulate and dispose of radioactive waste. If, having assessed the proposals, the Agency is satisfied the applicant will comply with the requirements of RSA93, it will issue the appropriate permission. These incorporate limits on the types and quantities of radioactive materials and numerous conditions to protect people, and the environment.

Nuclear licensed sites, such as power stations and fuel processing plants, require permissions under RSA93, in addition to licences under the Nuclear Installations Act 1965.

### **Regulation of the Nuclear Industry**

In England and Wales the disposal of radioactive waste from licensed nuclear sites, which include nuclear power stations and sites where fuel fabrication or reprocessing takes place, is regulated by the Agency. The Agency works closely with Her Majesty's Nuclear Installations Inspectorate (HMNI), which is primarily responsible for safety issues, to ensure that the regulatory activities at these sites are consistent, co-ordinated and comprehensive.

The Agency regularly reviews the RSA93 authorisations for all Nuclear Licensed Sites. Where such reviews suggest it would be appropriate to revise limits or conditions, draft revised Certificates of Authorisation, supported by explanatory memoranda, are made available as part of extensive public consultations. Comments received from this consultation are taken into account in finalising the Certificates of Authorisation.



*Dungeness Power Station*

### **Radiological Protection Principles**

In carrying out assessments of operators' proposals to dispose of radioactive wastes to the environment, the Agency applies Government policy on radiological protection principles:

- all practices giving rise to radioactive waste must be justified, in terms of their overall benefit.
- radiation exposure of individuals and the collective dose to the population arising from radioactive wastes to be reduced to levels which are as low as reasonably achievable, economic and social factors being taken into account.
- the exposure of individuals from all sources, excluding natural background radiation and medical procedures, should be below specified dose limits.



In many cases, extensive information is needed to justify proposals to generate and release quantities of waste by particular routes. In such cases, which will include almost all developments at Nuclear Licensed Sites, comprehensive details of equipment, control techniques and management arrangements need to be given.

### **Waste Disposal Records and Environmental Monitoring**

The Agency requires operators to keep detailed records of waste disposals. Some operators, particularly licensed nuclear sites, are required to conduct environmental monitoring surveys for radioactivity. We also commission independent monitoring to ensure that operators' results are valid.

### **Compliance and Enforcement**

The Agency assesses an operator's compliance with the terms and conditions of a permission by a combination of on-site inspection of the operator's premises, and scrutiny of records and other documents supplied by the operator. Breaches of conditions, are often rectified by discussion during inspections. Failure by an operator to comply with the terms and conditions of a permission may result in the Agency serving an Enforcement Notice or prosecuting, or both.



*Medway Estuary*

## **Regional PIR/RSR**

Apart from their involvement with policy development and delivery, staff in the Regional Office provide expert technical support to Areas and co-ordinate the collection and presentation of technical data and information for the Region.



*River Medway, Snodland showing Townsend Hook and Brookland Lake*

They act as a centre of expertise, provide authoritative advice and assist in emergency responses.

They also contribute to the development of consistent regional monitoring programmes for processes regulated by the Areas and manage their delivery. This includes performing technical audits of contractors delivering the service and auditing the operators own monitoring arrangements.

# Water Quality

**Bob Edmunds**



**Regional Manager  
of Water Quality**

**John Frake**



**Regional Water  
Quality Planning  
Section Head**

**4 X Senior WQ  
Planning  
Officers**

**WQ Planning  
Officer**

**Keith Jury**



**Regional Water  
Quality Protection  
Section Head**

**2 X Senior WQ  
Protection  
Officers**

**2 X WQ  
Protection  
Officers**

**Dick Flavin**



**Regional  
Groundwater  
Protection  
Section Head**

**Senior  
Groundwater  
Protection  
Officer**

**David Lowthion**



**Regional  
Scientific  
Investigations  
Section Head**

**Senior Scientist**

**4 X Scientists**

## **WATER QUALITY**

The Agency's principal aim for water quality is to achieve a continuing and overall improvement in the quality of controlled waters through the prevention and control of pollution.

Water is a fundamental requirement for all forms of life. Management of water quality for the future can only be achieved by effective policies to influence and regulate those activities that impact upon it.



The water environment includes rivers, lakes, canals, groundwater, estuaries and coastal waters. As well as ensuring the suitability of waters as natural habitats for animals and plants, it is recognised that many varied and often conflicting uses of the water environment are made by society. These include water abstraction for drinking water,

agriculture and industrial use, disposal of treated effluent, development of fisheries and a wide range of recreational activities.

The role of Water Quality is to resolve these conflicting issues, ensure that water is of suitable quality to support legitimate uses and maintain the diverse aquatic ecosystems. The Environment Agency endeavours to protect, manage and, where possible, enhance the quality of these controlled waters and contribute to sustainable development.

## **Legal Duties and Powers**

### **Classification of water quality**

The Agency has a duty to ensure that statutory water quality objectives are met and to monitor the extent of pollution.

### **Pollution of controlled waters**

Discharging effluents without the consent of the Agency constitutes an offence in all but the most exceptional circumstances. The Agency enforces these provisions and has the power to prosecute.

### **Issue of discharge consents**

The Agency has powers to issue consents for discharges to controlled waters. To enable members of the public to make their views known, consent applications must be advertised, unless the discharge will have no appreciable effect on receiving waters.



## **Provision of a public register**

The Agency has a duty to maintain, and make available to members of the public, a register recording applications for consents to discharge, records of consents given, samples of water or effluent and other related information.

## **Pollution prevention**

The Agency has the power to issue a variety of notices where action is required to reduce the risk of pollution. Enforcing such notices is a duty of the Agency. In addition, the Secretary of State can issue regulations (generally on Agency advice) obliging people concerned with potentially polluting activities to take precautionary measures to prevent pollution. Examples include regulations controlling slurry and agricultural fuel oil.

## **Recovering costs**

Applying the 'polluter pays' principle, the Agency has the power to recover costs incurred when:

- issuing and enforcing discharge consents
- monitoring effluents and their impact on the environment
- carrying out works to prevent pollution
- dealing with pollution incidents
- restoring waters to their previous condition

## **Statutory guidance**

Beyond its legislative duties and powers the Government has provided the Agency with formal statutory guidance on its overall objectives and the way it should seek to achieve them

Duties include:

- working in partnership with regulated organisations
- encouraging voluntary action to improve environmental performance
- encouraging knowledge and understanding of environmental issues and techniques
- developing a close and responsive relationship with customers
- providing clear and accessible advice and information on its work and on best environmental practice

In managing the water environment the Agency recognises the needs of its customers, those who make use of the water. They include the general public, the water industry and its representative bodies, such as the Water Services Association and the Water Companies Association, other national trade and industry groups, interest groups such as the Royal Society for the Protection of Birds, Friends of the Earth etc. It must operate in partnership with other organisations who have an interest in water quality. These include the Government (notably, DETR, MAFF and the Welsh Office), Local Authorities, the Office of Water Services (OFWAT), European and international



bodies, partner organisations with statutory powers, such as English Nature, academic institutions and research councils.

## **Monitoring**

The Agency monitors the water environment to assess compliance with objectives and environmental quality standards. Most of these are statutory and are contained in EC Directives.

If environmental standards are not being met, effluent standards may be tightened or other means of improving water quality will be pursued, for example by regulating water abstractions and flows.

This continual assessment and improvement cycle is the key to protection of the water environment. The monitoring programme is therefore reviewed from time to time to ensure its effectiveness and efficiency.

The Agency also monitors levels of other substances of concern to the water environment and seeks to secure improvements in water quality. Ways of achieving improvement are further explained in the following text.



*Nursling automatic water quality station*

## **Planning**

Detailed water quality planning at a catchment level is an established practice, and is being taken forward within the Local Environment Agency Plans (LEAPs). The priorities for improvement are contained in the annually updated Regional Water Quality Improvement Plan which forms a basis for LEAPs. We are also developing an Environment Agency National Plan for Water Quality. This will develop a planning base for the maintenance and future improvements in water quality. This will address groundwater, coastal waters and inland surface waters.

## **Water industry investment**

The privatised water companies are responsible for sewage disposal and water supply in England and Wales and have a significant impact on the water environment. The Agency monitors the water industry's implementation of environmental improvement schemes agreed in the second round of Asset Management Plan negotiations (AMP2). The Agency is also providing comprehensive input to the current review (AMP3) scheduled for completion in 1999, through a considered approach to investment needs for both water quality and quantity.

## Discharge control

The Agency regulates discharges to water through consents and vigorously enforces discharge control standards. It will review and improve the mechanisms imposed by discharge consents as a result of research and development (R&D), dialogue with industry and developments in the UK and abroad. A Discharge Consents Manual is being developed and serves as the primary policy document in this field.



*Sampling Burton sewage works*

New control mechanisms are adopted where appropriate. The Agency also seeks to work in partnership with dischargers to improve the overall environmental performance of their processes, rather than just the quality of the eventual discharge.

## Pollution prevention

To prevent pollution, the Agency adopts three approaches; education, partnership and implementation of legislative powers. Education is essential to demonstrate the effects of pollution and practical, often simple, measures to prevent it.

Promoting the codes of practice jointly agreed with commercial, industrial, agricultural and other organisations helps to minimise the risks of pollution that threaten the environment. In addition to education and partnership, the Agency consistently implements its legislative powers to prevent pollution.

The Agency is also developing its use of risk assessment for preventing pollution and targeting its effort. The production of groundwater vulnerability maps is an example of an approach that seeks to ensure water quality issues are fully considered before development takes place.

## Enforcement

The Agency always seeks to prevent pollution from breach of consents or unauthorised discharges. When pollution does occur the Agency takes firm enforcement action including prosecution if necessary, ensuring that the polluter pays for the damage caused and its remediation. The recovery of the costs is a civil matter. There are four main areas of charges, all of which have been agreed on a national standard basis.

They are:

- attending and dealing with the incident - this is calculated using a basic rate per hour for the various staff involved. The rate also covers the cost of travelling, administration etc.

- materials used - if material such as oil absorbent is needed at the incident the cost will be passed on to the polluter. A charge is also made for any photographs taken as evidence at the time of the pollution
- samples eg. river water -the lab makes a charge for analysis of samples taken
- other costs such as engaging specialist contractors to assist in cleaning up the pollution, or fish restocking

The money will have already been spent by the Agency in dealing with the pollution. By charging the polluter, the Agency is more self-funding and the pressure on taxpayers is relieved.

### **Rural land use**

Agricultural practices and the way land is managed have a significant impact on water quality, not least through nitrate pollution and pollution from farm wastes. Reductions in the levels of pollution reaching the water environment from diffuse sources, as well as from discharges at specific locations, are essential for improvements in water quality. These will be achieved by working with agricultural organisations, individual farmers, and through education. The Agency continues to vigorously enforce existing pollution control legislation and also influences the Government's contribution to the development of European legislation on rural land use, in its early stages.

### **Urban land use**

The impact of diffuse pollution sources from built up areas is becoming more apparent as pollution from point source discharges is reduced. In fact, intermittent discharges from sewers under storm conditions and run-off from towns, roads and airports may be one of the most significant factors affecting the recovery of fish populations. Input into the town and country planning process, and work at an early stage with developers, is often the most effective method of reducing this problem. Control strategies are being implemented and R&D continues to develop new solutions, often in partnership with the construction industry and the transport authorities.

### **European water policy and Directives**

The Agency ensures the requirements of EC legislation are properly implemented and maintained and that maximum environmental improvement is gained in the process.

Being responsible for the implementation of many EC Directives on water quality the Agency has a key role in assisting central Government in the formulation of European water policy. The Agency pursues opportunities to influence the formulation of EC water policy and EC directives to ensure they are both scientifically sound and appropriate to the environmental needs of England and Wales

Input to the proposed Water Framework Directive is a major priority as this will provide the basis for future EC policy. Planned revision of existing Directives is also of major importance.



## **Dangerous substances and trade effluent control**

The Agency has responsibility for regulating the discharges of dangerous substances to the public sewerage system, as well as directly to the water environment. This reflects the requirements of the Dangerous Substances Directive and UK legislation.

The Agency examines options for controlling these substances at source and at sewage treatment plants. It assesses the hazards and risks associated with dangerous substances reaching the environment through waste water discharges and the disposal of waste water treatment sludges. The Agency promotes a balanced approach to the beneficial re-use of sludges in agriculture and takes any action necessary to ensure its safe disposal.



*Site inspections*

The impact of endocrine disrupting chemicals and their control are currently the subject of R&D projects and appropriate control strategies will be developed. The development of toxicity based control methods may assist in regulation in the future, particularly of complex mixtures of pollutants. Research into this is currently being carried out and pilot studies are underway with assistance of industry.

## **Sewage and water treatment sludges**

Quantities of waste water treatment sludges to be disposed of are increasing and will continue to do so with the implementation of the Urban Waste Water Treatment (UWWT) Directive. The Agency is developing strategies with the water industry and others for the safe disposal or beneficial use of sludges, with particular regard to the environmental impacts of spreading them on agricultural land.

## **Research and development**

The Agency applies appropriate funds to research and development work, and also works in partnership with other research funding organisations to ensure the benefits of collaboration can be realised. Where appropriate it also works with industry, for example in developing practical mechanisms to meet legislative requirements.

## **Regional Water Quality**

At Regional level this function comprises Water Quality Protection, Water Quality Planning, Groundwater Protection and Scientific Investigations Sections.



## Water Quality Planning

This Section ensures statutory compliance with environmental quality standards and secures long term improvements in the quality of the aquatic environment. It also maintains the consistency of water quality planning in the Region by providing specialist advice and policy guidance to the Areas and by contributing to national policy and guidance.

This involves:

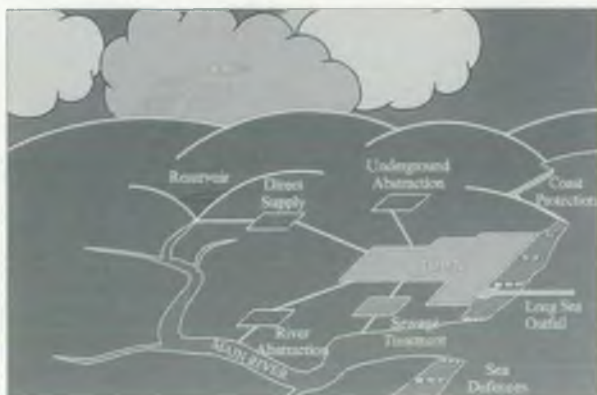
- liaising with Southern Water Services and other major dischargers to agree improvement plans for discharges.
- providing EC Directive compliance returns and reports to Head Office and the DETR.
- reviewing River Quality Objectives and producing improvement plans for the Region.
- making recommendations, to be forwarded to the Minister, on designations for waters under EC Directives, for example in connection with UWWT Directive (Comprehensive Studies, High Natural Dispersion Areas, Sensitive Waters etc.).
- arbitrating on "first time sewerage" appeals.
- producing bathing water improvement plans and reports.

## Water Quality Protection

This Section is responsible for the management and control of water quality protection measures to prevent pollution and protect water quality across the Region. It also provides data for the public register for water quality and the "Charges for Discharges" scheme.

It monitors and analyses trends in concentrations of significant pollutants, using predictive modelling, developing systems and applications and produces reports for future water quality across the region.

This Section is also responsible for registering new consents, revocations and variations.



*Water use diagram*

## **Groundwater Protection**

The work of this Section covers the national Groundwater Protection Policy and includes advising Area staff on the control of all potentially polluting activities on both policy and technical aspects.

It covers specific issues including groundwater pollution, the impact of contaminated land and landfill on water quality and the designation of Nitrate Vulnerable Zones under the EC Nitrate Directive.

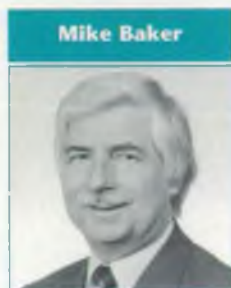
The Section also runs projects employing external consultants to assess major development proposals with potential impact on groundwater and to support objections at Public Inquiries. It also has responsibility for the clean-up of contaminated land causing groundwater pollution under the Government's Supplementary Credit Approval Scheme and runs projects to make use of these funds.

## **Scientific Investigations**

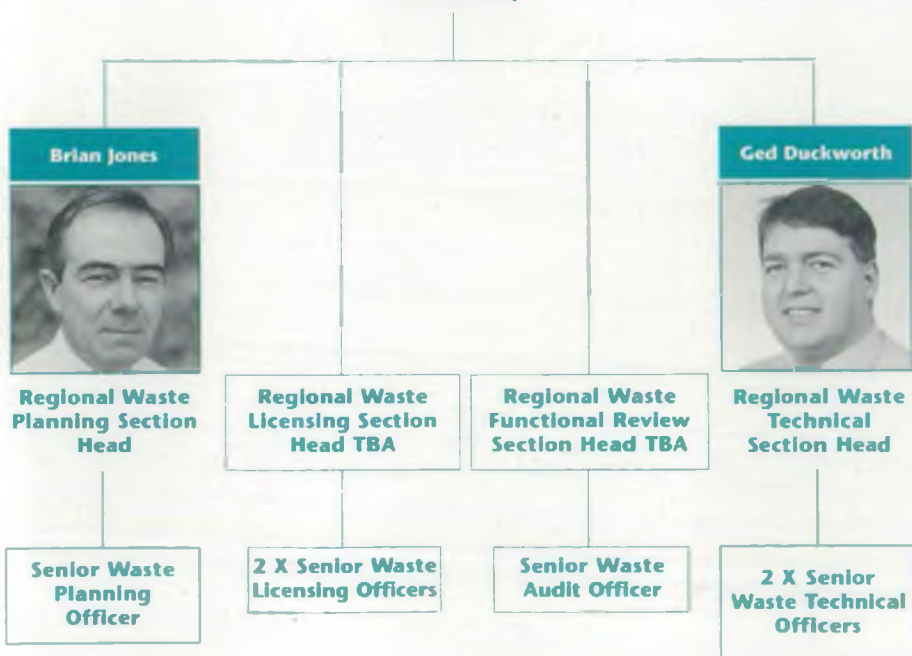
This Section provides environmental assessment, technical expertise, operational investigation and contract management services to the Region to enable implementation of National, Regional and Area environmental protection policies. It provides expertise and investigations in rivers, estuaries, coastal waters, contaminated land and other environments as required. The main areas of responsibility are:

- providing scientific and technical expertise on environmental quality issues
- acting as a Regional Centre of expertise on the marine environment, including water quality, microbiology, marine biology and monitoring
- gathering and providing specialist information for EC Directives (e.g. Bathing Water, Urban Waste Water Treatment, Dangerous Substances and Shellfish Waters Directives) and Asset Management Plans
- managing Regional Bathing Water monitoring programmes, including reporting and investigating non-compliance
- providing a service for coastal and estuarine water quality modelling to Environmental Protection and other Regional and Area staff
- undertaking specialist investigations in rivers, estuaries, coastal waters and contaminated land across the Region
- auditing environmental and modelling data provided in support of Water Companies, and other proposals.

# Waste Management and Land Quality



**Regional Manager  
of Waste and  
Land Quality**



# WASTE MANAGEMENT AND LAND QUALITY

## Waste Management and Regulation

The Environment Agency educates, regulates and influences organisations and individuals which:

- produce waste
- collect and transport waste
- deal with the handling of waste, its treatment, disposal, recovery and reuse

### Sustainable Waste Management

The Government's strategy for sustainable development gives a clear message that we need to reduce the waste we create, and find good environmental solutions for the waste we produce.

The previous Government's White Paper, "Making Waste Work", recognised many of these issues. It started putting in place mechanisms to deliver change, like the Landfill Tax and producer responsibility for packaging. There was little recognition of the scale of change required to meet its own targets for recycling and recovery, and it did not place its strategy squarely in the context of sustainable development and resource use. These key weaknesses must be addressed and the Agency looks forward to working with the current Government on these issues.

Sustainable Waste Management is the umbrella under which all other aspects of waste management sit, both regulatory and non-regulatory. Historically the control of waste has been by regulation and, although this continues to be a major element of the Agency's work, it is now widely recognised that in order to deliver sustainable waste management all sectors of industry, central and local government, the Agency and other interested groups will need to co-operate.

### Regulation

A legislative framework underpins the Government's policies for waste management. This framework puts responsibility on nearly all parties involved in the production and ultimate fate of waste. The key pieces of legislation from which we derive our duties and powers are:

- Control of Pollution (Amendment) Act 1989 (Registration of Waste Carriers)
- Environmental Protection Act 1990
- Waste Management Licensing Regulations 1994 (as amended)
- Transfrontier Shipment of Waste Regulations 1994
- Environment Act 1995
- Special Waste Regulations 1996
- Producer Responsibility Obligations (Packaging Waste) Regulations 1997



In carrying out our work we must have regard to statutory guidance issued by the DETR including:

- Waste Management Paper 4 - Licensing of Waste Management Facilities
- Waste Management Paper 4a - Licensing of Metal Recycling Sites
- Waste Management Paper 26a - Landfill Completion
- Duty of Care Code of Practice

This legislation and guidance gives the Agency the following duties and responsibilities:

- licensing of facilities where waste is kept, treated, or disposed of, including assessing operators' "fit and proper persons" status
- registration of particular prescribed activities exempt from licensing
- environmental monitoring and compliance assessment of licences and certain exemptions
- regulation of waste handling and transportation
- "cradle to grave" regulation of wastes that are environmentally significant or dangerous to health (special wastes)
- registration of waste carriers
- regulation of imports and exports of waste
- enforcement against illegal waste management activity, including Duty of Care offences
- incidents and emergencies response
- enforcement of Producer Responsibility Regulations
- provision of statutory information
- strategic waste management assessment
- commitments to the Government's White Paper on Waste Strategy
- advice on planning consultations
- advice to DETR and other Government departments, local authorities and industry
- encouragement of best practice and waste minimisation
- research and development

## **New Responsibilities**

Some of the responsibilities set out above have been introduced since the establishment of the Agency. Both the Special Waste Regulations and the Producer Responsibility Obligations (Packaging Waste) Regulations are subject to revision and extension. It is also expected that there will be a continuing flow of new and amended legislation, much of which will be delivering EU requirements in the UK. It will increasingly involve the use of the regulatory system to deliver specific targets designed to reduce the overall impact of waste. The following are expected to be part of this:

- the proposed Landfill Directive
- the Integrated Pollution Prevention Control (IPPC) Directive
- the proposed Directive on Disposal of Polychlorinated Biphenyls (PCBs) and Polychlorinated Terphenyls (PCTs)
- further producer responsibility initiatives including End of Life Vehicles, Electrical and Electronic Goods etc.
- the possible Directive on Hazardous Household Waste

## Waste Strategy

"Making Waste Work" sets out a number of targets. These were based around the following objectives:

- reducing the amount of waste society produces
- making the best use of the waste that is produced
- minimising the risks of immediate and future environmental pollution and harm to human health
- adopting the principles of the "waste hierarchy":



*The waste hierarchy*

The White Paper set out a fivefold approach to achieve these objectives and associated targets, based on a series of strategies:

- regulatory strategy
- market based strategy
- planning strategy
- promotion strategy
- data strategy

The Agency has a key role in assisting both the Government and industry in tackling these issues.



*Pumping station within GlaxoWellcome building*

The current Government, whilst acknowledging this work as a step in the right direction, considered that it did not recognise the scale of changes required to meet the targets for recycling and recovery. Nor did it place its waste strategy squarely in the context of sustainable development and resource use. Its new consultation document, "Less Waste, More Value", suggests ways on how this approach could be moved forward. It is based on seven key commitments:

- substantial increases in recycling and energy recovery
- engagement of the public in increased reuse and recycling of household waste
- a long-term framework with challenging targets based on realistic programmes
- a strong emphasis on waste minimisation
- using the waste hierarchy as a guide, not a prescriptive set of rules
- creative use of economic incentives like the landfill tax
- increased public involvement in decision making

The Agency is expected to be involved in many aspects of the development of the National Strategy and its delivery. Key to this is the supply of data to support the establishment of targets, and to monitor their performance. Other important issues to the Agency will be its waste minimisation work and the supporting information it develops to inform policy decisions of Central and Local Government.

## Land Quality

The Agency has two main roles in land contamination:

- existing powers and responsibilities under pollution control functions to prevent and control land and water pollution.
- new duties and powers expected to be implemented in July 1999 that will enable the Agency to tackle the legacy of problem sites where a plausible source-pathway-receptor linkage exists.,

The Agency's vision is to see more contaminated land made safe and brought back into beneficial use, and an integrated approach to preventing and controlling new land contamination.

The Agency's Land Quality Action Plan sets out the aims and objectives for managing land contamination as part of its overall environmental strategy. The plan provides us with the basis to:

- develop an integrated approach to land contamination
- promote sustainable solutions to land contamination
- ensure that problem sites are identified and cleaned up



Land contamination may be a result of waste disposal or industrial use. It is often associated with processes that are now obsolete. As well as sites affected by substances occurring as a result of human activity, in some places large areas of land are affected by natural substances, including natural sources of methane, or metals and other chemical substances that occur in rocks and soil.

Not all these sites are a cause for concern. Section 57 of the Environment Act 1995 introduces a specific definition of "contaminated land". This new legislation focuses on sites which could cause problems in their current use. It is difficult to estimate exactly how many sites this covers, but the Agency's initial estimate is between 5,000 and 20,000 "problem sites". Other sites could also become problem sites when they are redeveloped unless care is taken in choosing the form of development, in designing remediation and in carrying out work on site.

The Agency is one of many organisations in the private, public and voluntary sectors with interests in and responsibilities for land contamination. In its goal to secure a better environment and contribute to sustainable development, the Agency will work in partnership with other organisations and use its statutory duties and powers to address land contamination. The Agency will continue to research and develop new tools and techniques at the strategic, policy and operational levels to help achieve its aims.

## **Legal Responsibilities**

New responsibilities under S57 of Environment Act 1995 are divided between the Agency and local authorities:

### **Environment Agency**

Duties:

- providing information to local authorities on land contamination
- ensuring remediation of special sites
- maintaining a register of special sites remediation
- preparing a national report on the state of contaminated land

Powers:

- providing advice to local authorities on identifying pollution of controlled waters
- providing advice to local authorities on the remediation of contaminated land

### **Local authorities**

Duties:

- inspecting their areas to identify contaminated land
- consulting the Agency on pollution of controlled waters
- ensuring remediation of land identified as contaminated
- transferring regulatory responsibility of "special sites" to the Agency
- maintaining remediation registers

### **Land contaminated by radioactive substances**

Proposals for a similar regime for land contaminated by radioactive substances are under consideration by DETR. The Agency's Land Quality Function will work closely with the Radioactive Substances Regulation Function and DETR to integrate the two regimes.



*River Meon*

# Environmental Surveillance

**Bob Mead**



**Regional Manager  
of Environmental  
Surveillance**

**Lorraine Dempster**



**Regional  
Environmental  
Campaigns  
Coordinator**

**Martin Jerome**



**Regional  
Environmental  
Registrar**

**Bob Dines**



**Regional  
Biologist**

**Viv Pettitt**



**Regional  
Environmental  
Business  
Planning  
Coordinator**

**2 X  
Environmental  
Surveillance  
Officers**

**Environmental  
Surveillance  
Officer  
(Support)**

**2 X Environmental  
Surveillance  
Officers  
(Instrumentation)**



## ENVIRONMENTAL SURVEILLANCE

This Function's main objective is to drive a cross-functional management process for the whole Environmental Protection Department and, in the process, to question existing practices. The Function aims to plan, manage and control the quantity and quality of environmental monitoring in the Region and utilise this information to enhance the state of the environment. It is also responsible for overseeing the maintenance of the statutory registers.

It co-ordinates business planning and campaigns across the Environmental Protection Functions, to maximise their impact and delivery of environmental targets.

The Function is split into four Sections, Quality Audit and Instrumentation, Business Planning, Biology and Environmental Campaigns.

### Legislation

The cross-functional nature of the work means it is less explicitly linked to legislation than the other Functions within the Department. European Directives have particular relevance to monitoring programmes and the Water Framework Directive is likely to be of huge significance in the way it will shift the emphasis from chemical to biological monitoring for assessing the state of the environment. Registers and Environmental Information are linked explicitly to legislation. The various functional legislation contains the requirements for the various registers, while the Environmental Information Regulations place significant responsibility on the Agency.



*Emissions to the environment*

### Quality Audit and Instrumentation

Quality Audit oversees the regional sampling programme and service level agreement with the National Laboratory Service and Area Biology laboratories. This includes setting up and maintaining appropriate Quality Management Systems.

The Section is responsible for:

- maintaining and carrying out quality review of data on the water quality archive (WIMS).
- giving advice and guidance to sampling staff on procedures, results and provision of necessary resources (sampling bottles, labels etc).
- the maintenance, calibration and repair of monitoring equipment used by staff in the Areas and Region.
- providing the regional contact point for the statutory Public Registers.
- provision of data returns to Head Office.

## Business Planning

This Section is responsible for co-ordinating the Business Planning Activities of Area and Regional staff in Environment Planning and Protection, ensuring the plans meet functional objectives, national requirements (such as the Corporate Plan) and Head Office directives.

It is also responsible for monitoring the Region's performance against the Agency's targets set out in the plan. The targets are constantly reviewed to ensure continuing relevance.

The Section also collates internal and external data. The environmental information derived from this is used to inform the business planning process and to influence public behaviour in respect of the environment.

## Biology

Each Area in Southern Region has a Biology Team within the Fisheries, Ecology and Recreation (FER) Function. They are responsible for planning, executing and reporting a wide range of biological surveys and assessments including:

- water quality assessment related to specific problems or for general classification purposes
- tracing and determining the impact of pollution incidents
- determining conservation value
- river corridor surveys in relation to flood defence maintenance works
- river plant surveys around sewage discharges covered by the UWWT Directive



*Mayfly nymph*

Most of this work involves the use of aquatic plants and animals as indicators of environmental quality. These organisms respond to factors which affect their environment including pollution (point source, diffuse and intermittent), climatic factors and habitat degradation so they provide a truly integrated measure of environmental quality. This has significant advantages over chemical assessments which, although giving a precise measure of pollutant levels, can only represent quality at the instant the sample was collected and only for a limited range of pollutants. Using the two approaches together, with ecotoxicology as a third option, provides a powerful tool for environmental management. Biological methods are being increasingly used by the Agency and will form the basis of the forthcoming EC Water Framework Directive.

### **Role of Regional Biologist**

Although the Area Biology teams report to the Fisheries Ecology and Recreation Managers, much of the work they do is inextricably linked to surveillance of the environment. This brings it within the wider remit of the Environmental Surveillance Function and the Regional Biologist has management responsibilities for the teams in relation to Regional and national programmes, methods and quality assurance. Specific tasks include:

- ensuring that a consistent and high standard biological service is provided across the Region
- ensuring that all Regional and national work programmes are carried out
- providing high level advice and expertise for the Region on all biological issues
- representing the Region at National level
- contributing to developments in biological techniques and their use within the Agency and ensuring that national developments in biology meet Regional needs as far as possible

### **Relevant Legislation**

National policy requirements for biological assessments including planning and co-ordination of:

- annual Regional and quinquennial National General Quality Assessment biology surveys
- UWWT Directive - macrophyte and diatom surveys around qualifying discharges
- bioaccumulation and shellfish surveys related to the Dangerous Substances and Shellfish Directives



## Other Information

The introduction of Biological Quality Objectives will mark the beginning of a major change in the use of biological information by the Agency. The Water Framework Directive will formalise this with a statutory requirement for all surface waters (freshwater and marine) to meet ecological targets that will replace many of the current chemical targets. Overall, the Agency is planning to make far greater use of the integrated picture of environmental quality which is provided by biological measures - for further details see the Agency publications

"Viewpoints on the Environment" and "An Environmental Strategy for the Millennium and Beyond".



*River Medway*

## Environmental Campaigns

This Section is responsible for co-ordinating environmental campaigns in the Region, with the idea of making the best use of environmental data and information held by the Agency. It aims to reduce pollution and encourage sustainability through information and education. The Section co-ordinates and implements public education initiatives to promote the work of the Regional Environmental Protection Department.

It is also responsible for researching, identifying and initiating environmental campaigns.

## FINALLY

We hope this Directory is useful and of interest. If you would like further information on any of the subjects covered please contact the Environment Agency. Details are on the back cover.

# ENVIRONMENT AGENCY – Southern Region



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### KENT AREA

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### HAMPSHIRE & ISLE OF WIGHT AREA

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Wessex Business Park  
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Hampshire SO21 1WP  
Tel: 01962 713 267  
Fax: 01962 841 573

### ISLE OF WIGHT

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Fax: 01983 822 985



ENVIRONMENT AGENCY

If you think flood warnings are in force in your area, call our 24-hour 'dial and listen' information line.

**ENVIRONMENT AGENCY  
F L O O D C A L L**

**0645 88 11 88**

For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY  
GENERAL ENQUIRY LINE**

**0645 333 111**

For 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

**ENVIRONMENT AGENCY  
EMERGENCY HOTLINE**

**0800 80 70 60**

## NATIONAL LIBRARY & INFORMATION SERVICE

### SOUTHERN REGION

Guildbourne House, Chatsworth Road,  
Worthing, West Sussex BN11 1LD



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