NRA MISC 16

NATIONAL RIVERS AUTHORITY/
CHIEF & ASSISTANT CHIEF FIRE
OFFICERS' ASSOCIATION

A PARTNERSHIP IN ENVIRONMENTAL PROTECTION

A booklet to accompany the video

ENVIRONMENT AGENCY
117827

WATER - THE BRINGER OF LIFE

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Environment Agency

INTRODUCTION

The video film "Water - the Bringer of Life", produced jointly by the West Midlands Fire Service on behalf of the Chief and Assistant Chief Fire Officers' Association (CACFOA) and the National Rivers Authority (NRA), aims to assist in making firefighters aware of the dangers of pollution to water resources, and in methods of dealing with incidents where pollution has occurred.

This booklet provides further information for firefighters with the aim of assisting in combined efforts to minimise the hazards to the water environment.

It should be noted that the jurisdiction of the NRA only applies to England and Wales.

The term "Controlled Waters" used in the film and this booklet means:

- sea out to three miles from the shore
- coastal waters - including estuaries
- inland waters, i.e. rivers, streams, lakes
- ground waters - the natural underground reservoirs or "aquifers"

A "Memorandum of Understanding"(MOU) exists between the NRA and CACFOA. Much of it is reproduced here, but greater detail on subjects like pollution offences, guidelines on when the NRA should be informed, and the polluting potential of low hazard products can be found in the MOU which all Fire Services possess.

ROLES AND RESPONSIBILITIES OF THE NATIONAL RIVERS AUTHORITY

Whilst the video film deals specifically with pollution, the NRA has many other responsibilities relating to the water environment.

STRUCTURE

The NRA is a major environmental protection agency with the task of safeguarding and improving the natural water environment.

Established in 1989, the NRA is an independent public body serving England and Wales. It is accountable to Parliament and entirely separate from the various water supply and sewage disposal companies.

The NRA has statutory responsibilities and powers in relation to a number of important functions including pollution control, water resources, flood defence, fisheries, conservation and recreation.

Policy issues are co-ordinated by the NRA's Head Office in Bristol, and policy decisions are made by a national board consisting of 15 men and women appointed by the Government (12 by the Department of the Environment, 2 by the Ministry of Agriculture, Fisheries and Food and 1 by the Welsh Office).

The day-to-day operations of the NRA are handled by eight regions distributed across the country (see Map on page 16).

POLLUTION CONTROL

The seas and rivers have long been used as a disposal system for human, industrial and agricultural wastes. The NRA's aim is to reduce the impact of these activities by regulation, monitoring and active pollution prevention. A key control is that anyone who wishes to discharge waste water into the aquatic environment needs permission from the NRA. The granting of such permission (known as "consent to discharge") is only agreed if damage to the water environment will not take place. If consent is given it is subject to strict limits.

WATER RESOURCES

There are demands placed upon our water resources for public supply, industry and agriculture. These demands have to be balanced by the need to maintain environmentally satisfactory levels in our rivers and underground reservoirs.

NRA staff closely monitor river flows, groundwater levels, rainfall and evaporation. This information helps the protection and management of the amount of water available.

An essential management test is the control of abstraction. This is a carefully regulated activity and requires a licence from the NRA which incorporates conditions to conserve water and so protect the environment.

Water for firefighting purposes is, of course, exempt.

FLOOD DEFENCE

A key role for the NRA is the protection of people and property from flooding. Each flood risk location is considered by the NRA and given a priority rating for action. Resulting schemes can vary from flood banks or by-pass channels to dams, which delay and control flood water. Sea defences are built to protect low-lying coastal areas.

Once constructed, the schemes are maintained with an on-going programme of routine work. This includes dredging, weed control, debris removal, grass cutting, bank protection and upkeep of river structures.

The NRA is also responsible for providing a flood warning service. Staff use the latest technology to monitor rainfall and river levels. Weather radar and satellite pictures are also studied. Flood warning officers will predict when and where flooding is likely to occur and inform the Police accordingly.

A development control section within the NRA advises local planners on whether planning applications are likely to lead to flooding problems.

FISHERIES

It is the job of the NRA to maintain, improve and develop fisheries on rivers, streams, canals and lakes in England and Wales.

Fish stocks are regulated by a number of methods including the issue of rod and net licences, net limitation orders and the control of fishing methods and seasons by by-laws. Anyone who goes freshwater fishing must have an NRA rod licence. A vigorous approach is taken to combat illegal fishing.

Stocks are regularly monitored and maintained in various ways including the installation of fish passes, the removal of obstructions and the improvement of spawning gravels.

CONSERVATION

Any watercourse is home to a vast variety of flora and fauna. In carrying out its work, the NRA pays special attention to the local landscape amenities and habitats.

Where possible, new nature conservation areas are created to counter-balance the practical use of the river for the community.

Wildlife features of the river are surveyed and mapped so that engineering and other initiatives can be planned to conserve the best characteristics, create new ones and still meet their objectives.

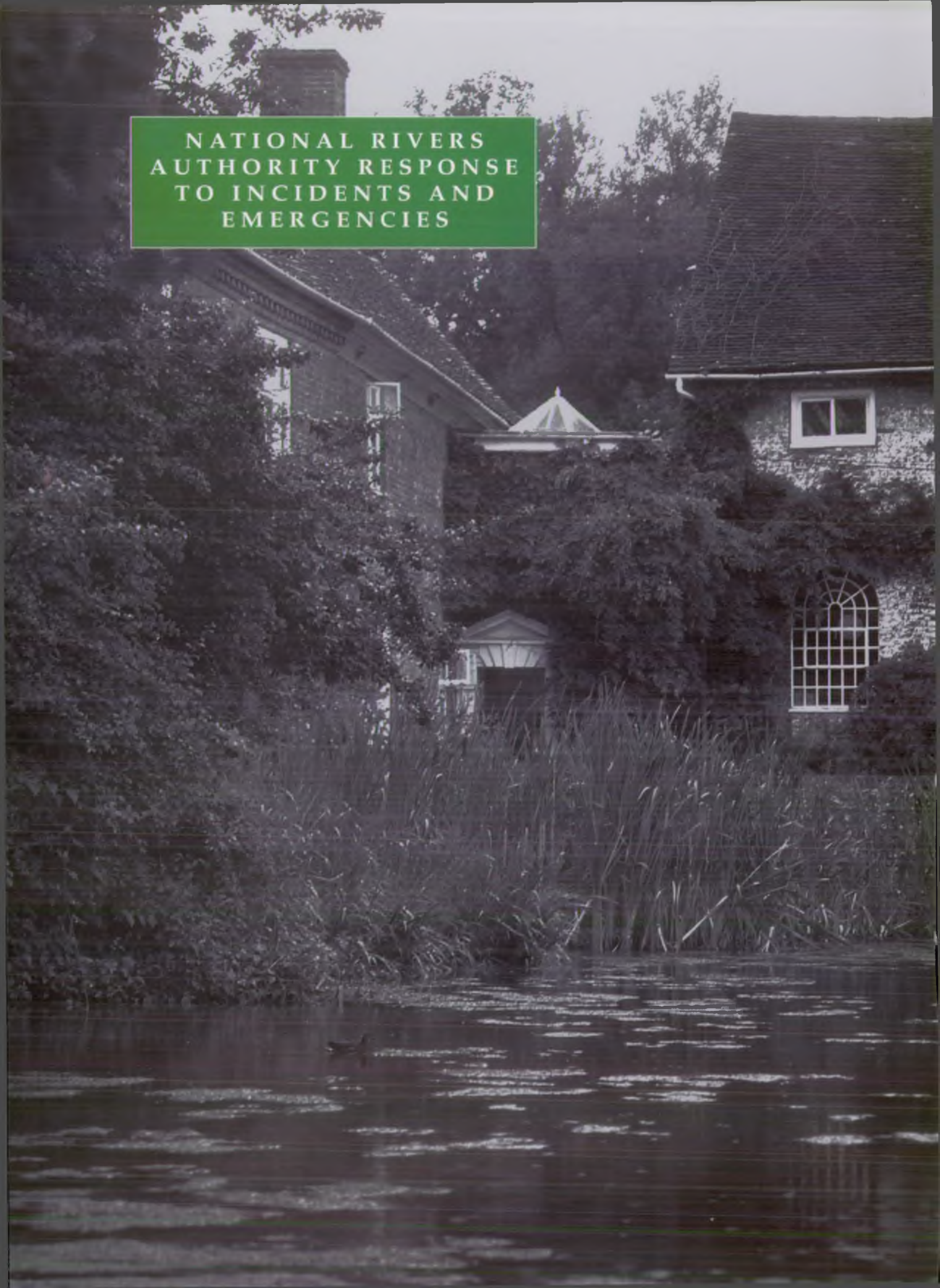
RECREATION

Water attracts people. By improving and promoting facilities, the NRA can assist those who wish to enjoy the water environment.

The task is to strike a balance between the pursuit of pleasure on the one hand, and the conservation of the environment on the other.

In some areas, the NRA is the navigation authority on rivers. The non-tidal Thames, for example, is controlled by the NRA.

NATIONAL RIVERS AUTHORITY RESPONSE TO INCIDENTS AND EMERGENCIES



INITIAL INFORMATION

Each region of the NRA has a 24 hour Regional Communications Centre (RCC), which receives calls from members of the public and the emergency services concerning pollution, flooding and poaching.

There is a National Freephone number (0800 807060) which can be used to report incidents by which callers will be put through to the appropriate region. This is for public use.

Emergency services are normally given a special number to call which will be known in their control rooms.

Pollution incidents about which the NRA should be informed can vary and are explained in the MOU. Liaison between each Fire Service and the NRA should establish guidelines. The important thing to remember is that a substance may be harmless to humans but extremely damaging to the water environment. The MOU gives examples of such substances.

The information will be passed by the RCC to a duty Water Quality Officer (WQO) in the appropriate area.

ASSESSMENT

The duty officer will assess the information given and normally visit the scene.

Where the emergency services are present, he/she should establish contact with the Officer in Charge, and will try to elicit as much additional information as is available.

It should be borne in mind that, without the aid of blue lights and sirens, and considering the large geographical areas which water quality officers might have to cover outside normal office hours, it may be some time before NRA staff arrive at the scene.

However, they can always be contacted via the RCC.

On arrival, the WQO will determine the operational priorities and arrange whatever assistance is needed.

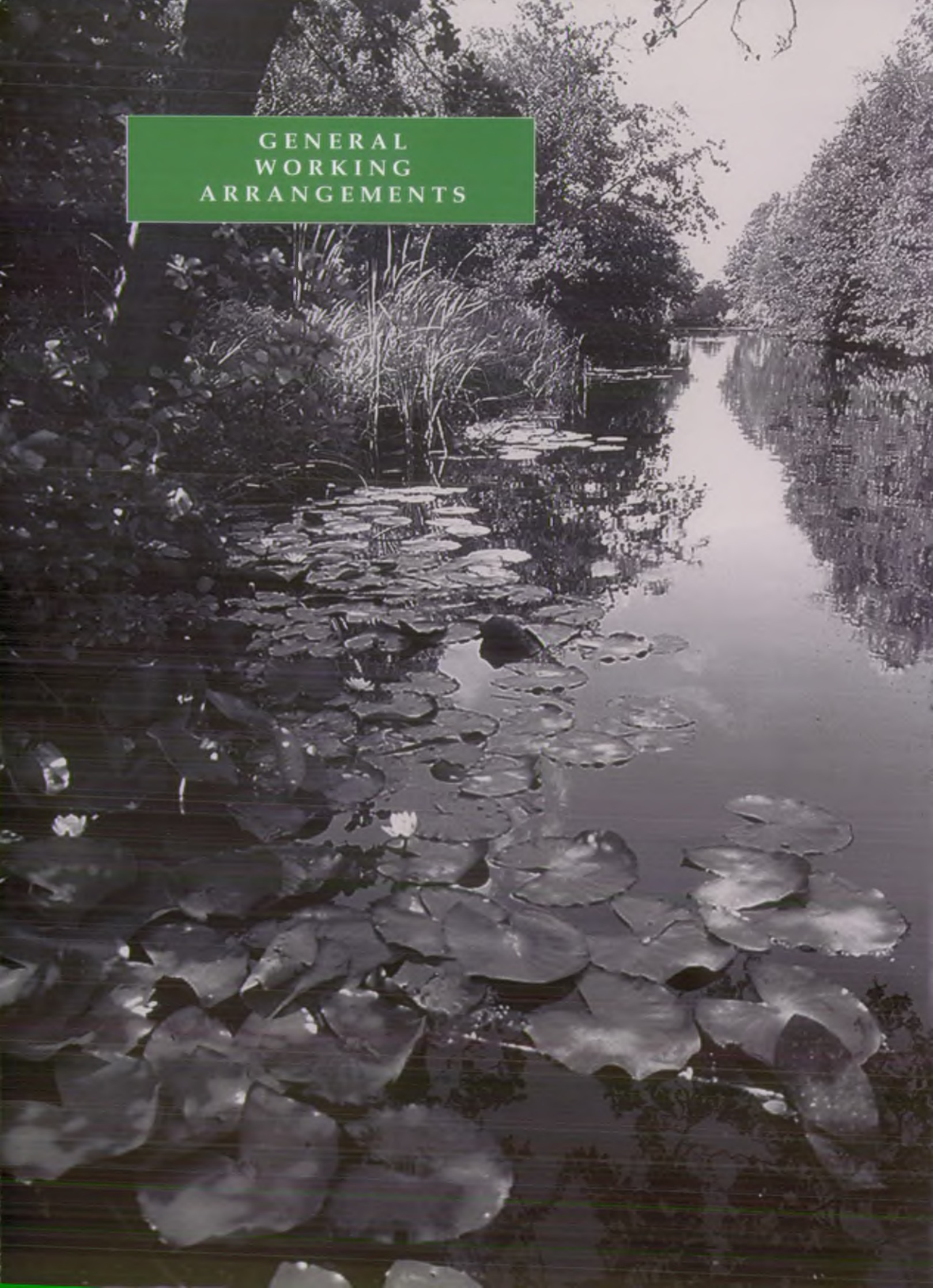
The basic objectives will be:

- preventing the situation getting worse by stopping or containing the polluting material.
- remedial action to start to improve the situation.
- collection of evidence in case further action is needed against the polluter.

OPERATIONAL ACTIONS

The WQO may have to send for specialist equipment to deal with the pollution.

Until such time as it arrives, he/she will need to do what they can with whatever is available. They may request the assistance of the Fire Service to improvise some temporary prevention measures.



GENERAL WORKING ARRANGEMENTS

POLLUTION OF THE WATER ENVIRONMENT

Pollution to the water environment may occur at some fires or accidents to which the Fire Service have been called, or may arise as the result of firefighting actions.

The Fire Service should inform the NRA of incidents where pollution has occurred or could occur. As mentioned earlier, the type of pollution which should be reported must be established by local liaison.

The Fire Service will take all reasonable steps to prevent pollution of controlled waters, taking advice from the NRA as required.

NRA personnel responding to an incident as a result of a fire or special service call, should report to the Incident Control Point to give advice and assistance, as required to the senior Fire Officer present, on the control of pollution to controlled waters. NRA personnel will be clearly identifiable by means of a tabard bearing the NRA initials and logo; they will also carry identity cards.

The NRA will take responsibility for remedial actions in connection with controlled waters when they have become polluted during an emergency. Whilst rescue or firefighting work is continuing, the NRA will only deal with an incident within the fireground with the permission of the senior Fire Officer present.

The NRA may advise modification of activities such as "contain" rather than "dilute" or "controlled burn", in order to minimise environmental damage.

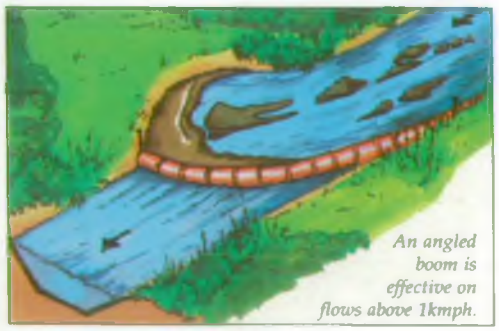
The first method of dealing with oil pollution on a river is likely to be the use of an absorbant boom. This has the capacity to absorb oil but repel water. The boom is deployed across the river and secured at each end using stakes.

Behind this absorbant boom an inflatable boom is placed to contain any oil which escapes the first one.

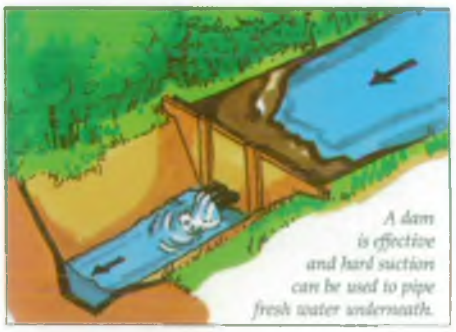
A boom placed directly across a river would only be effective where the flow is about 1kmph or less. Above this speed, a significant amount of oil is likely to be carried underneath. One way to overcome this is to place the boom diagonally across the river to deflect the oil into the side where the flow is less swift and the oil can be contained more effectively.

It is not always necessary to have specialist equipment on hand to deal with oil pollution. By placing hard suction hose on the river bed to allow fresh water to pass, and then creating a dam over these using ladders and salvage sheets, an effective defence can be contrived to contain oil.

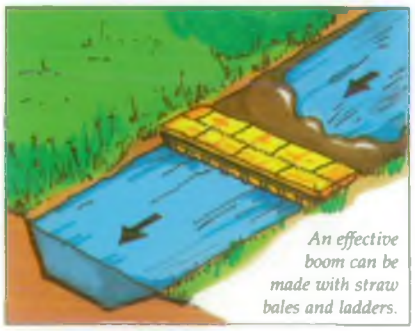
Another method, which may be used in a rural area where hay or straw bales are available, is to secure these to ladders to make an improvised boom. Not only will this make an effective barrier, but the hay or straw will start to absorb the oil.



An angled boom is effective on flows above 1kmph.



A dam is effective and hard suction can be used to pipe fresh water underneath.



An effective boom can be made with straw bales and ladders.

DECONTAMINATION PROCEDURE

In connection with decontamination, the following guidance is given:-

Ideally, all contamination and decontamination run-off should be contained. However, the NRA accept that this will not always be practical for normal Fire Service operations, and that life saving decontamination procedures must take precedence over other considerations at the scene of an incident. Nevertheless, all steps which are reasonably practicable should be taken to contain contaminants.

Whilst the current practice of using a 2000:1 dilution factor is going to be acceptable in the vast majority of

cases, there are a few chemicals which could cause problems even below this limit. The Fire Service should therefore inform the NRA as soon as possible when decontamination procedures are being used, so that the appropriate advice can be given.

Where either the Fire Service or the NRA possess equipment which would be of use to the other during an emergency, a request for its use would be considered.

The NRA is responsible for taking legal action, where appropriate, in respect of a pollution incident to controlled waters.

Under the Water Resources Act 1991, the NRA can reclaim its own costs incurred in dealing with a pollution. This would include contractors called in by the NRA specifically to act on their behalf, but does not include the costs of organisations attending in their own right.

USE OF FIRE SERVICES AS SERVICE PROVIDERS TO THE NRA

The Fire Service may undertake special service pollution control or mitigation activities on a contract basis following a request from the NRA. Payment will be made and an NRA order number will be required before work begins.

Consideration will be given by the NRA to the provision of some pollution control equipment to the Fire Service for carrying on their appliances. It may not be practical to equip all appliances due to the large number involved in some areas. In these cases, thought should be given to a smaller number of strategically located packs.

FIREFIGHTING FOAM TRAINING AREAS

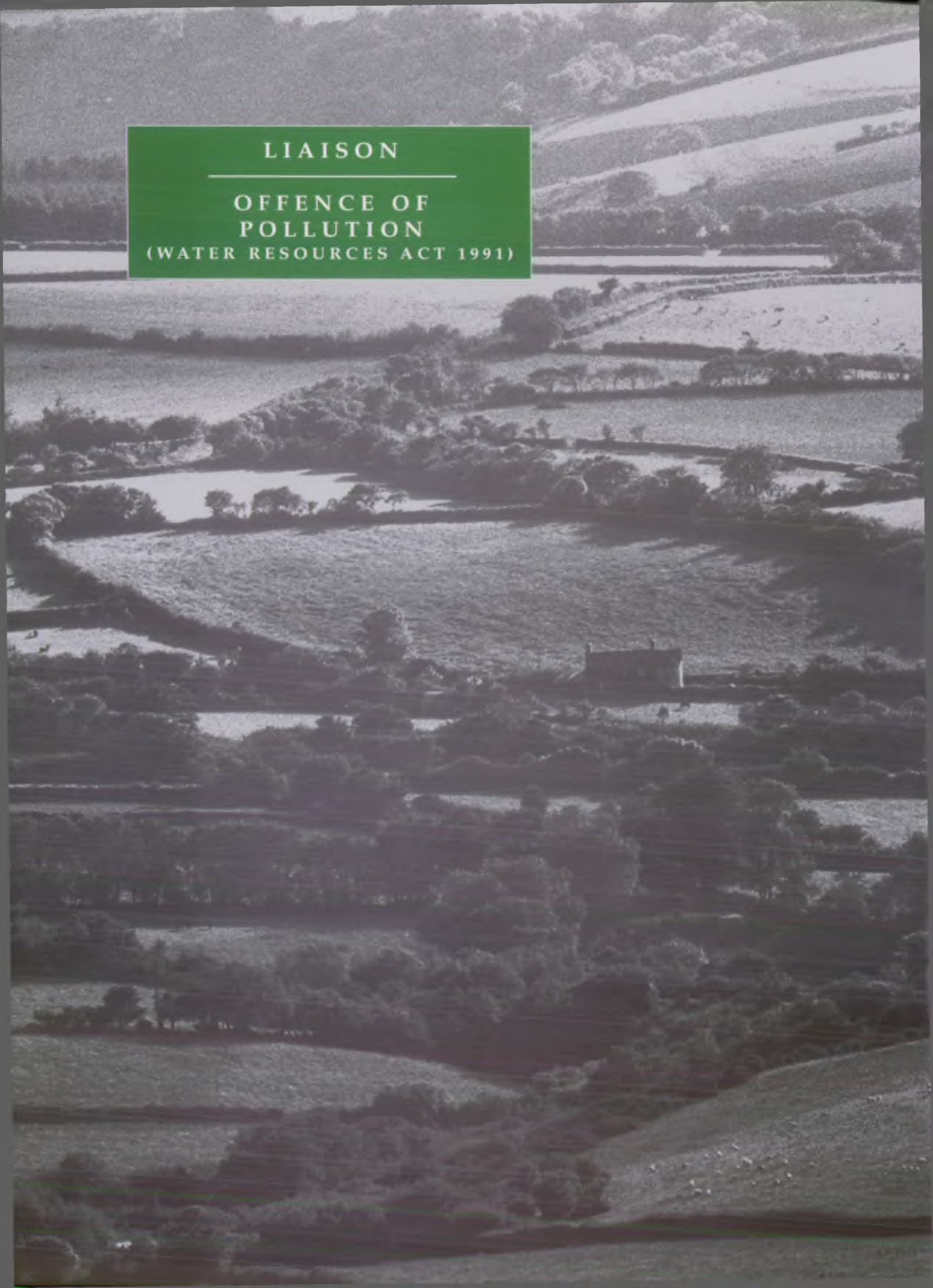
Firefighting foam is a potential source of pollution to watercourses.

The Fire Service should liaise locally with the NRA in connection with sites for training and exercising with firefighting foam (discharge consents may be needed from fixed sites).

TRAINING

The NRA will endeavour to offer training to Fire Service staff, both locally at appropriate training sessions, conferences etc, and centrally at the Fire Service College, Moreton-in-Marsh.

This training includes participation in planning and running exercises where appropriate.



LIAISON

OFFENCE OF POLLUTION
(WATER RESOURCES ACT 1991)

LIAISON

Where one Fire Service area is served by more than one NRA Region, the Region forming the larger part of the area will act as the contact point for the Fire Service. This Region will pass on all details to the other Region where appropriate. In a case where this arrangement is not considered effective, and the Fire Service agree to more than one contact point, then local arrangements may be made. It is considered, however, that this should be the exception rather than the rule.

Joint consultation will be undertaken to ensure that contingency plans for firefighting at high risk sites include provision to minimise contamination of controlled waters. Joint site inspections may be undertaken when this is considered effective. The initiative for inspections could come from either the NRA or the Fire Service and both parties should be consulted at the planning stage.

THE OFFENCE OF POLLUTION
(WATER RESOURCES ACT 1991)

A person has committed an offence if he/she causes or knowingly permit any poisonous noxious or polluting matter or any solid waste matter to enter any controlled waters.

However, a person shall not be guilty of an offence under Section 85 in respect of the entry of any matter into any water or any discharge if:-

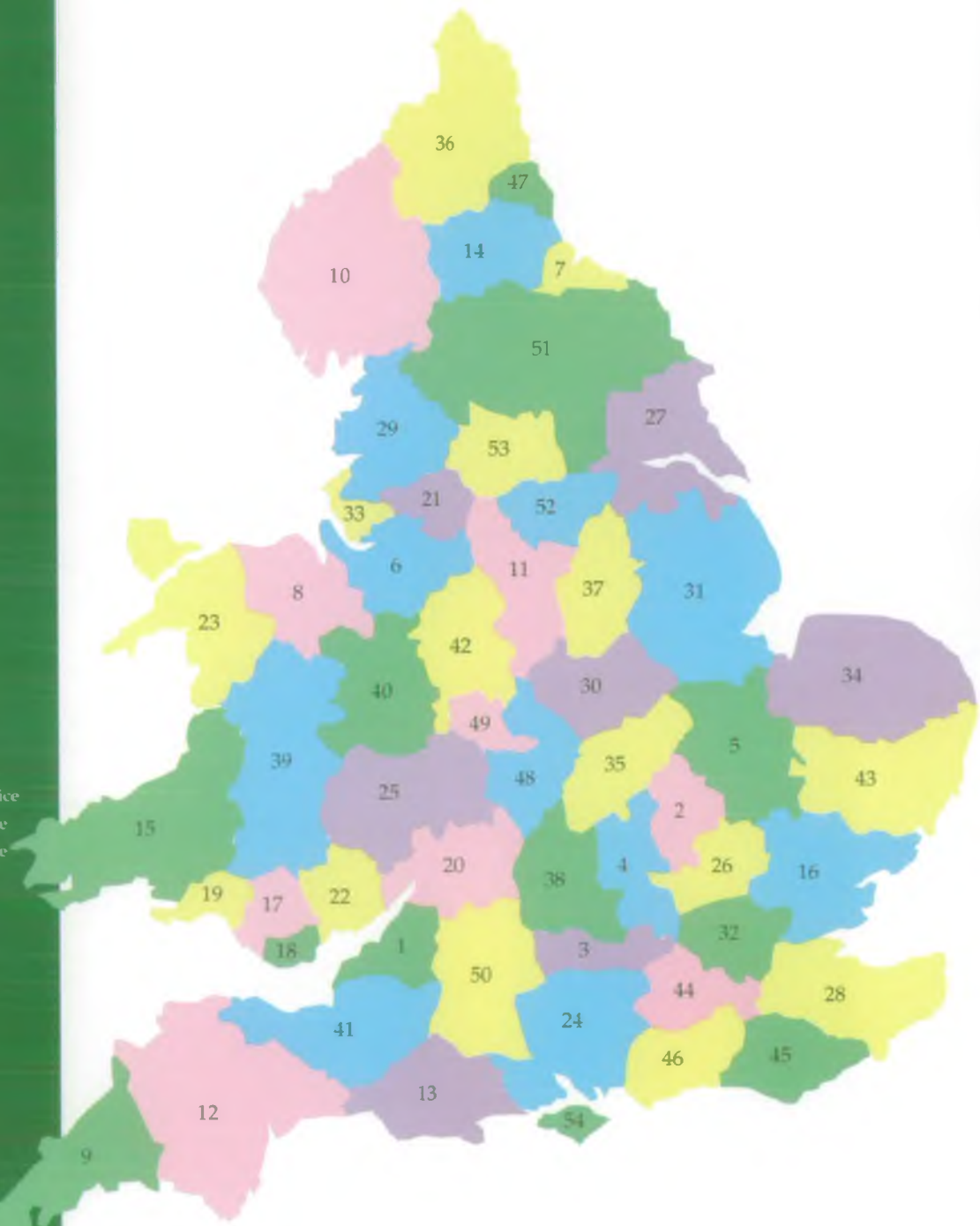
a) the entry is caused or permitted, or the discharge is made, in any emergency in order to avoid danger to life or health;

b) that person takes all such steps as are reasonably practicable in the circumstances for minimising the extent of the entry or discharge and of its polluting effects; and

c) particulars of the entry or discharge are furnished to the Authority (NRA) as soon as reasonably practicable after the entry occurs.

FIRE SERVICE AND NATIONAL RIVERS AUTHORITY REGIONS IN ENGLAND AND WALES

1. County of Avon Fire Brigade
2. Bedfordshire County Fire & Rescue Service
3. Royal Berkshire Fire & Rescue Service
4. Buckinghamshire Fire & Rescue Service
5. Cambridgeshire Fire & Rescue Service
6. Cheshire Fire Brigade
7. Cleveland County Fire Brigade
8. County of Clwyd Fire Service
9. Cornwall County Fire Brigade
10. Cumbria County Fire Service
11. Derbyshire Fire Brigade
12. Devon Fire & Rescue Service
13. Dorset Fire Brigade
14. Durham County Fire Brigade
15. Dyfed County Fire Brigade
16. Essex County Fire & Rescue Service
17. Mid Glamorgan Fire Service
18. County of South Glamorgan Fire & Rescue Service
19. West Glamorgan County Fire Service
20. Gloucestershire Fire & Rescue Service
21. Greater Manchester Fire Service
22. Gwent Fire Brigade
23. Gwynedd Fire Service
24. Hampshire Fire & Rescue Service
25. Hereford & Worcester Fire Brigade
26. Hertfordshire Fire & Rescue Service
27. Humberside Fire Brigade
28. Kent Fire Brigade
29. Lancashire County Fire Brigade
30. Leicestershire Fire & Rescue Service
31. Lincolnshire Fire Brigade
32. London Fire Brigade
33. Merseyside County Fire Brigade
34. Norfolk Fire Service
35. Northamptonshire Fire & Rescue Service
36. Northumberland Fire & Rescue Service
37. Nottinghamshire Fire & Rescue Service
38. Oxfordshire Fire Service
39. Powys Fire Service
40. Shropshire Fire & Rescue Service
41. Somerset Fire Brigade
42. Staffordshire Fire & Rescue Service
43. Suffolk County Fire Service
44. Surrey Fire & Rescue Service
45. East Sussex Fire Brigade
46. West Sussex Fire Brigade
47. Tyne & Wear Metropolitan Brigade
48. Warwickshire Fire & Rescue Service
49. West Midlands Fire Service
50. Wiltshire Fire Brigade
51. North Yorkshire Fire & Rescue Service
52. South Yorkshire Fire & Rescue Service
53. West Yorkshire Fire Service
54. Isle of Wight County Fire & Rescue Service



NATIONAL RIVERS AUTHORITY REGIONAL HEADQUARTERS

ANGLIAN REGION
Kingfisher House
Goldhay Way
Orton Goldhay
PETERBOROUGH PE2 5ZR
Tel: 01733 371811

NORTH WEST REGION
PO Box 12
Richard Fairclough House
Knutsford Road
WARRINGTON WA4 1HG
Tel: 01925 53999

SEVERN TRENT REGION
Sapphire East
550 Streetsbrook Road
SOLIHULL B91 1QT
Tel: 0121 7112324
Local Control:
Tewksbury 01684 850951

SOUTHERN REGION
Guildbourne House
Chatsworth Road
Worthing
WEST SUSSEX BN11 1LD
Tel: 01903 820692 (24 hours)

SOUTH WESTERN REGION
Manley House
Kestrel Way
EXETER EX2 7LQ
Tel: 01392 444000

THAMES REGION
Kings Meadow House
Kings Meadow Road
READING RG1 8DQ
Tel: 01734 593333

WELSH REGION
Rivers House
St Mellons Business Park
St Mellons
CARDIFF CF3 0EG
Tel: 01222 770088

NORTHUMBRIA & YORKSHIRE REGION
21 Park Square South
LEEDS LS1 2QG
Tel: 01532 440191

ENVIRONMENT AGENCY

At the time of printing it is the Government's intention to form an Environment Agency in April 1996 which will encompass the duties of the NRA, the HMIP and the waste regulations duties of Local Authorities. Whilst the title "National Rivers Authority" will therefore disappear, the principles concerning pollution to watercourses and the co-operation between the Fire Service and the new organisation will remain the same.

To report pollution, fish kills or flooding to the National Rivers Authority please phone:

NRA EMERGENCY HOTLINE

0800 807060