# 1995 Report Summary

"Vigilance, communication, and the support services – all powerful forces in the battle against water pollution"

# Water pollution incidents in England & Wales



Total number of pollution incidents in England & Wales, 1986-1995

The construction industry was the most frequently identified source of industrial pollution. The Environment Agency is working with the industry to produce a training video and detailed pollution prevention advice.



Discussions with transport industry representatives are well underway to identify changes in operations and vehicle design which could reduce pollution risk in the future.





# Distribution of substantiated pollution incidents by source, 1995

#### All incidents

Sewage & Water Indus 7,156-30%	-
Industry 4,763-20%	
Transport 1,788-8%	
Agriculture 2,720-12%	
Other 7,035-30%	-

Category 1 incidents only	
Sewage & Water Indus 48-24% -	-
Industry 62-31%	
Transport 16-8%	
Agriculture 32-16%	
Other 41-21%	-

#### Introduction

The new Environment Agency for England and Wales provides a comprehensive approach to the protection and management of the environment by combining the regulation of land, air and water. Its creation is a major and positive step, merging the expertise of the National Rivers Authority, Her Majesty's Inspectorate of Pollution, the Waste Regulation Authorities and several smaller units from the Department of the Environment.

The Agency exists to provide high quality environmental protection and improvement. This is achieved by an emphasis on prevention, education and vigorous enforcement wherever necessary.

During 1995 the number of pollution incidents reported to the NRA rose slightly to 35,891. 23,463 were later substantiated, a fall of 8% since 1994. The number of the most environmentally damaging (Major) incidents continued to fall, from 229 to 199. Since 1990 the number of Major incidents has fallen dramatically, with significant reductions in agricultural (from 239 to 32) and oil incidents (from 87 to 45). Both agricultural and oil pollution have been targetted by NRA pollution prevention initiatives in recent years. Major incidents relating to road accidents have, however, increased slightly, highlighting an area for future action.

Reporting is likely to have been influenced by wider public awareness of

"Most pollution incidents are the result of ignorance or apathy and could be prevented. There is continued determination within the Environment Agency to ensure that pollution prevention measures and messages work."

- Phil Chatfield: Principal Pollution Officer.

# Substantiated pollution incidents by type, 1995

## All incidents

Sewage 6,128-26%		
Oil 6,025-26%	-	
Chemical 1,725-7%	+	
Organic Wastes 2,699-12%	-	
Susp. solids 1,410-6%	-	
Other 5,476-23%	-	

### Category 1 incidents only

Sewage 37-18%	
Oil 45-22%	
Chemical 48-24%	-
Organic Wastes 28-14%	-
Susp. solids 2-196	
Other 41-20%	-

the NRA's pollution hotline and improved communication with the Fire Services. The continued reduction in the number of "major" incidents provides strong evidence that the NRA's pollution prevention measures and messages, backed by firm legal action against polluters', have taken effect.

## Sources

Pollution incidents are categorised by both source and type of pollution. By source, the sewage and water industry accounted for the greatest proportion (30%) of incidents and of these, surface water outfalls and combined sewer overflows accounted for the largest proportion. The construction industry was the most frequently identified source of industrial pollution for the second consecutive year, whilst dairy farming was the major source of agricultural pollution. Types

By type of pollutant, both sewage and oil accounted for 26%. Efforts have been made to improve our recording of incident the stream was dammed to contain the spillage. Submersible pumps and a vacuum tanker were used to remove the milk which was subsequently spread onto nearby land by a local farmer. The operation took three days but meant that serious environmental damage was avoided and a large number

# A combination of education and communications initiatives, plus strict enforcement, has seen a 48% reduction in the number of major incidents during the six years of the NRA.

data and, as a result, fewer are recorded as "other". Inert suspended solids were the most common pollutant in the "other" category, accounting for 6% of all incidents. Cattle slurry was the most frequently identified organic waste and paints and dyes the principal type of chemical. Where identification was possible, diesel was the most commonly identified oil, but in 36% of oil pollution incidents the type of oil could not be determined.

The most notable change has been the 13% fall in the number of oil pollution incidents since 1994. Oil pollution has been subject to intensive pollution prevention activity (the Oil Care Campaign), involving the NRA, local authorities and the oil industry over the last two years.



# Examples of Pollution Incidents Transport

In June 1995, a milk tanker travelling along the A69 west of Newcastle suffered a tyre blow-out. As a result, the valve on the outlet pipe was fractured and 22,000 litres of milk spilled to the highway drainage system which discharges to a tributary of the Tyne. Milk is highly polluting because it is so readily broken down by naturally occurring bacteria. This rapidly removes the dissolved oxygen in river water, killing fish and invertebrates alike.

NRA staff were quickly on the scene and

of fish that faced death, including salmon, were saved.

Since this incident, the tanker company has redesigned the outlet pipe to prevent a recurrence. Although the company involved were not prosecuted for this incident, they did have to pay £4,000 for the clean-up work.

## Agricultural Slurry store

On the 7th of July, 1995, during a student barbecue at Aberystwyth University's Tanygraig Farm at Llanfarian, the two locks on a 680,000 litre slurry store were vandalised and the valves opened. The incident was discovered by farm staff who closed the valves and called in the NRA and the Police. A series of dams was constructed on the ditches (which run to the Afon Ystwyth) and the 150,000 litres of slurry which had been discharged were contained, preventing damage to the river.

River flow was low at the time and a number of large salmon were present in pools immediately downstream. Two students were interviewed and subsequently cautioned by the Police following the incident. In this case prompt action by the staff and the NRA prevented the spillage causing pollution. A virtually identical incident at the farm in 1984 had caused a major fish mortality.

## Prosecutions

Prosecutions were brought for 163 incidents and 149 polluters were successfully convicted. At the 1st of January, 1996, there were 151 cases for incidents in 1995 that were due to go before the courts. The highest single fine, of £17,000, was imposed on Severn-Trent Water following a discharge of crude sewage as a result of a failure at a sewage treatment works. However, Railtrack and British Rail were each fined £15,000 following an oil pollution incident involving a rail tanker in the Midiands.



The 19% fall in major farm pollution incidents between 1991 and 1995 demonstrates the effectiveness of a co-ordinated programme of publicity, prevention, regulation and grants.

# DON'T IGNORE IT, REPORT IT!



Your prompt action helps us protect the environment.

## **Pollution Prevention**

All industrial sites pose a potential threat to our natural water environment. Spillages occur throughout the country every day, sometimes devastating wildlife habitats, killing fish and destroying the invertebrate life on which fish and many animals feed.

Throughout 1995 the NRA endeavoured to establish new links with industry and other regulators whilst building on existing relationships. An example of this approach followed the identification of the construction industry as the largest industrial source of water pollution in 1994. Efforts are being made to help the industry identify what can be done to improve matters. A training video for construction workers is being produced by the Environment Agency, working with the Construction Industry Research and information Association (CIRIA) and representatives from the industry itself. The video identifies the causes of water pollution from construction sites and how it can be avoided. In addition, at the request of a number of construction companies, the NRA provided assistance with in-house staff training programmes.

The decision to introduce a video for the construction industry follows on from the success of the Pollution Prevention Pays video, launched in 1994. This video continues to be available, free of charge, by calling 0345-337700. Your call will be charged at local rates.

Environment Agency

ENVIRONMENT AGENCY

EA: Nate Quality - Box?

Information Centre

Head Office

128015

# MANAGEMENT AND CONTACTS:

The Environment Agency delivers a service to its customers, with the emphasis on authority and accountability at the most local level possible. It aims to be cost-effective and efficient and to offer the best service and value for money.

Head Office is responsible for overall policy and relationships with national bodies including Government.

Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS12 4UD Tel: 01454 624 400 Fax: 01454 624 409

# **ENVIRONMENT AGENCY REGIONAL OFFICES**

ANGLIAN

Kingfisher House Goldhay Way Orton Goldhay Peterborough PE2 5ZR Tel: 01733 371 811 Fax: 01733 231 840

NORTH EAST Rivers House 21 Park Square South Leeds LS1 2QG Tel: 0113 244 0191 Fax: 0113 246 1889

NORTH WEST Richard Fairclough House Knutsford Road Warrington WA4 1HG Tel: 01925 653 999 Fax: 01925 415 961

# MIDLANDS

Sapphire East 550 Streetsbrook Road Solihull B91 1QT Tel: 0121 711 2324 Fax: 0121 711 5824

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.

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water. SOUTHERN Guildbourne House Chatsworth Road Worthing West Sussex BN11 1LD Tel: 01903 832 000 Fax: 01903 821 832

## SOUTH WEST Manley House

Kestrel Way Exeter EX2 7LQ Tel: 01392 444 000 Fax: 01392 444 238

## THAMES

Kings Meadow House Kings Meadow Road Reading RG1 8DQ Tel: 0118 953 5000 Fax: 0118 950 0388

## WELSH

Rivers House/Plas-yr-Afon St Mellons Business Park St Mellons Cardiff CF3 0LT Tel: 01222 770 088 Fax: 01222 798 555

ENVIRONMENT AGENCY GENERAL ENQUIRY LINE 0645 333 111

.....

ENVIRONMENT AGENCY EMERGENCY HOTLINE 0800 80 70 60





HO-5.96-12K-C-AUKL Printed on Cyclus - A 100% recycled tcf paper