

1997 Report Summary

“The increase in major incidents in the last year is a serious cause for concern and shows that we can not assume a continued reduction in pollution.”

Water pollution incidents in England & Wales



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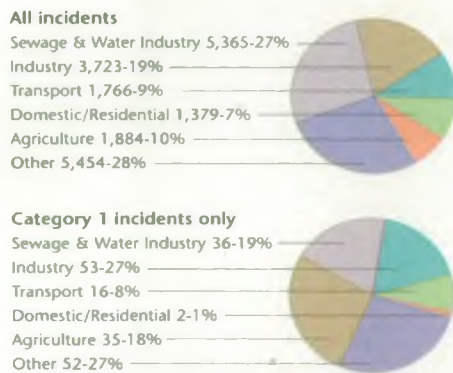
The three environmental regulators in the UK have joined together in using the same Emergency Hotline. Prompt reporting can help in reducing the impact of pollution.



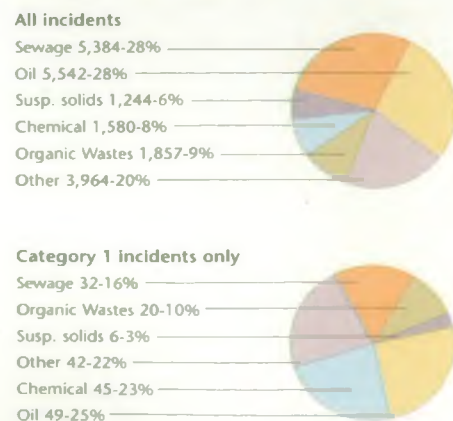
Total number of pollution incidents in England & Wales, 1988-1997



Distribution of substantiated pollution incidents by source, 1997



Substantiated pollution incidents by type, 1997



Introduction

This leaflet provides summary details of the Environment Agency's Water Pollution Incident Report for 1997. The Report covers the first full calendar year of the Agency's operation, during which time major steps were being taken to integrate the functions of the Agency inherited from predecessor organisations. Throughout this period, the Agency has given a high priority to responding to reports of water pollution and to managing such incidents in order to minimise their environmental impact.

A considerable effort is made to record not only information on the sources and types of pollution but also, where possible, how and why such incidents occur. This data is analysed to focus our pollution prevention activities, gaining the maximum benefit from the limited resources available. It can also help to identify those areas where the voluntary approach is inadequate and statutory powers may be appropriate.

During 1997 the number of water pollution incidents reported fell by 5% to 30,699, of which 19,571 were substantiated when our staff investigated, a fall of 3% since 1996. Major (Category 1) pollution incidents, which cause the most environmental harm,

reflects a number of factors, including public awareness of environmental issues and of the Emergency Hotline for reporting such incidents. Promotion of the number should be improved as a result of the recent agreement with the Scottish Environment Protection Agency (SEPA) and the Environment and Heritage Service in Northern Ireland to use the 0800 80 70 60 number for reporting environmental incidents throughout the United Kingdom from 1 April 1998.

Although the fall in the number of incidents is welcome, it is small in comparison with the two preceding years and in most regions there has been little change or even an increase, compensated by a large fall in one region. This and the factors contributing to the increase in Major incidents will be the subject of detailed study so that we can identify the actions needed to bring about a sustained reduction in the number of incidents and their severity.

Sources

Pollution incidents are categorised by both source and type of pollution. There was no significant difference in the overall distribution of incidents between 1996 and 1997. By source, the sewage and water industry accounted for the highest percentage (27%) of incidents, the majority of which related to uncontrolled discharges from sewerage systems. The construction industry was again the most frequently identified source of industrial pollution with a 15% increase in the number of incidents

"The increased co-operation on pollution prevention between the environmental agencies in the UK is resulting in a consistent approach, which benefits both the environment and business."

rose for the first time in seven years, from 156 in 1996 to 194 in 1997.

This increase has occurred in every category of source, with agricultural incidents up from 28 in 1996 to 35 in 1997, industrial up from 42 to 53 and transport up from 12 to 16. Despite recent efforts to prevent oil pollution, the number of Major oil incidents rose from 29 in 1996 to 49 in 1997. Major incidents involving run-off water from fires and road accidents were again a significant feature and the number of major incidents ascribed to natural causes, particularly in eastern England, was notable.

The reporting of incidents to the Agency

to 588. The food processing industry again featured as the second most frequently identified source, although in this case the number of incidents fell by 16% to 359, closely followed by the engineering industry with 357. The Agency has identified the need to develop guidance on preventing pollution from such sites. In the agricultural sector, dairy farming remained the most common source of water pollution, followed by sheep farming.

Types of pollutant

There was no significant change in the proportions of the different types of pollution

between 1996 and 1997. The most common types were oil and sewage (both 28%). Organic wastes accounted for 9%, with cattle slurry accounting for the largest proportion. Of the 8% of incidents involving chemicals – paints and dyes accounted for the largest proportion. Silt accounted for 1,244 incidents, 6% of the total.

undertaken using Flumethrin, a synthetic pyrethroid (SP) at the farm.

The biological survey indicated that over 20km of the river had been affected.

Synthetic pyrethroid (SP) sheep dips are less toxic to mammals and, therefore sheep dip operators, than organophosphorus (OP). As a consequence they are used as



“The cause of the increase in major oil pollution incidents will be carefully analysed to identify any implications for the proposed oil storage regulations.”

Examples of Water Pollution Incidents

Chemical handling

Almost 15,000 fish, including salmon, sea trout and eels, died after a spillage of caustic soda at the British Nuclear Fuels Ltd (BNFL) Sellafield plant. Approximately 1,700 litres were lost from a partially open valve in the early hours of 18 July 1997 during a transfer of material on site. The liquid leaked into a trench and via a drain to the River Calder. The incident may have been made worse by the action of BNFL staff in washing down the spilt material. The company informed the Agency later that morning, by which time the caustic material had reached the sea and been neutralised, and nothing could be done to save the fish in the river.

Adequate procedures and simple pollution prevention measures could have prevented the incident. In court BNFL staff revealed that they were unaware of the valve through which the liquid had leaked, as the company had not provided adequate operating instructions. In addition, the company had been advised of the threat posed by the direct drain following a risk assessment of the site carried out by our staff in 1994. The company pleaded guilty to four offences in relation to the incident and were fined a total of £32,500 and ordered to pay prosecution costs of nearly £25,000.

Agricultural

Sheep dip

During a routine biological survey, on the 14 August 1996, an Environment Agency biologist was alarmed at the lack of invertebrate life in the River Irthing at Wiley Sike, north east of Carlisle. Further investigation traced the source of the problem to a farm at Gilsland. When the sheep dip area was inspected it was apparent that the drainage from the sheep dipping bath and a foot dip could reach the River Irthing via a pipe. Sheep dipping had been

extensively as OP's in many areas. Although they are about 100 times more toxic to stream insects and crayfish than OPs, their devastating impact on these species may go unnoticed. However, as the food source for fish can then be wiped out, anglers may subsequently report reduced fish stocks.

The fact that the dip from just one farm was sufficient to have detectable impact on over 20km of river indicates the extreme toxicity of SPs to certain species and emphasises the need for the utmost caution in their use and disposal. The case came to court in August 1997, when the farmer was fined £2,000.

Prosecutions

Prosecutions were brought in 1997 for 67 incidents occurring within the year. A further 104 cases from 1996 were also heard, and a total of 169 convictions were obtained. There were 127 cases from 1997 outstanding on 1 January 1998. The highest fine imposed under the Water Resources Act 1991 was £12,000, which was imposed in four unrelated cases, two involving discharges of sewage from the sewerage system, one oil pollution from a shipyard and an incident in which two drums of disinfectant were tipped into a surface water drain, wiping out all life in the receiving stream.

Cost Recovery

The Agency has the power to recover in full its costs associated with the investigation of an incident and related clean-up costs, even when no other legal action is taken. In 1997 over 3,750 such recharges were made for sums ranging from £9 to £24,951. The total recovered from polluters was £1.14 million.



The effect of pollution can be devastating. Some of the many thousands of fish which died in the incident at Sellafield.



Pollution from urban drainage systems can be avoided if suitable techniques are adopted. The joint SEPA/Environment Agency publication "Sustainable Urban Drainage" provides design details and examples.

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Pollution Prevention

The Agency believes that it is far better to prevent pollution than to deal with the consequences, when it may be too late to prevent damage to the environment. It therefore invests considerable efforts in preventing pollution, where possible working with other organisations which share a common objective. In some cases, the Oil Care Campaign for example, partners include local authorities, retailers and those involved in the petroleum industry.

Pollution prevention involves a range of activities, from data collection and research to site visits, educational initiatives and the publication of information and guidance. A series of ten pollution prevention leaflets

were published early in 1997, covering a wide range of topics, such as farm waste management, pollution from domestic activities and chemical and solvent pollution.

Links with the environmental regulators in Scotland (SEPA) and Northern Ireland (Environment and Heritage Service) have been established and there is increasing co-operation on pollution prevention. Early in 1997, SEPA's guidance document on Best Management Practices for surface water disposal, which provides guidance on how to tackle the water quality problems which arise as a result of conventional surface water drainage systems, was adopted by the Environment Agency. This was republished as a joint document called "Sustainable Urban

Drainage". The Agency's series of Pollution Prevention Guidance notes are being revised and published as joint documents by all three UK regulators. Of the 20 original documents, 7 are now available as joint publications with SEPA. One new guidance note, dealing with spillages on highways (PPG22) was published jointly by all three organisations in December 1997 and work on the remaining documents and a number of new titles is progressing. In most cases the consultation process also involves relevant industry groups and experts outside of the agencies. A full listing of the guidance notes appears on the tear-off slip attached to this leaflet.

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.

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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

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

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EMERGENCY HOTLINE

0800 80 70 60



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