An Overview of Law and Environmental Care Related to Mine Water Pollution

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ABSTRACT

In November 1991 the Wheal Jane tine mine in Cornwall began decanting a highly acidic cocktail of toxic metals into the River Carnon. Within a short period this discharge became the best known river pollution incident this country has known.

In October 1992, the President of the Board of Trade, Michael Heseltine, announced that British Coal would be shutting a large proportion of their mines across the country, leading to the re-privatisation of the remaining collieries.

The laws that relate to redundant mines and pollution are not part of the Mines and Quarries Act 1954 [1] but are enshrined in the Water Act 1989 [2] and Water Resources Act 1991 [3].

The phrasing of Section 108 [4]:

"A person shall not be guilty of an offence by reason only of his permitting water from an abandoned mine to enter controlled waters" [4]

This bald statement includes the most complex legal term in the English Legal Dictionary. 'Abandoned' has so many connotations and meanings from ships to children and morals that it muddies the waters of understanding [5] and has no accepted definition with regards to this Act. The main players are the National Rivers Authority, Department of the Environment, The Department of Trade and Industry, the mine operators - both public and private, Parliament and H.M. Government. At the periphery are local interest groups, environmental groups, county and district councils.

INTRODUCTION

The work which has been undertaken by the Clean Rivers Trust has been to research present understanding of the broad issues with regard to this subject and in two reports in 1992 [6] and 1993 [7] the Trust reported that the statutory regulator, with regard to the water environment, the National Rivers Authority (NRA) were having problems talking with the mining companies. The NRA, even though putting together a memorandum of intent with British Coal - this agreement being reached at the highest level - is still not working at the 'coal face'. The NRA have the wish to prosecute British Coal for any further pollution from redundant mines but they find the law against them and also rulings such as the Cambridge Water Company versus Eastern Counties Leather plc [8] which clarified another grey area of English Law vis-a-vis that

reasonable forseeability is now clearly a prerequisite to any claim for damages for nuisance or prosecution for that matter for pollution.

The same occurred with regard to the owners (Carnon Holdings Limited) of Wheal Jane in 1991 and 1992. The company was publicly held up by the NRA and the local councils as the polluter who was hiding behind the law - even though the mine owners had put forward a remediation plan and report of the full background [9]. The NRA though did not make this commonly known. Interestingly original material was taken from this report and appeared under the NRA's logo [10] to show what the Authority envisaged as the answer in 1992. In 1994 Carnon Holdings are the main supplier of remediation via their one active tailings dam and traditional treatment methods. The NRA has received a grant of £8,000,000 to date to fund the Wheal Jane pollution. This year 1% of discharge will be treated by 'novel methods', lime dosing and wetlands that are several years behind the industry's known methods which are the state of the art.

THE WAY WE SEE IT

The environment movement

The Trust believes that industry is the only way forward for the environment and for industry to be respected, as the way forward, sustainable improvements must be thought through, rather than a gut reaction or a gloss to pacify local communities.

For decades and generations the earth has been seen as a free, unlimited source and supplier of all that we need in the way of base materials. That material has been taken regardless of the consequences to water, land or air.

Stories of doom and gloom appeared in the early 70's and the public, through the setting up of environmental organisations, began to be aware, and educated, to the hidden price to their health and environment. Although industry was aware of what was happening within its practises it failed to understand how educated the consumer was getting.

As environmentalists put the pressure on industry it became protectionist and very defensive of its ways of working. Pushed along by the small but very vocal environmentalist lobby politics and politicians looked to legislation as a remedy. European Directives appeared and once legislation started to be put in place government spending on the environment started to be cut back.

Industry had a shock that it had to respond to. In the past remediation, if it was in place, apt to be cheap and chemical - often known as bucket chemistry. Now things were changing tighter legislation and lack of government funding meant that the industrial giants had to put up their prices, not only because they had to put in anti-pollution infrastructures but also had to make their places of employment safer for the workforce.

Chemical costs soared through the roof and accordingly so did those of chemical remediation. Biologically sustainable methods of remediation were known but with chemical costs rising it was the turn of the biotechnical industry to point out the way forward. All over the world nature had quietly developed her own methods of remediation, in China wetlands had contended with water from mines centuries old. The biotechnical industry is only now realising

what it has, though as long as people can obtain raw materials, such as limestone from the heart of an English national park by the tonne, just to dump in water, the natural methods of nature will continually take a back seat.

This situation will change through awareness and education as government at local and natural level realise the value of raw materials and limit their use to only what can be justified for sustainable ways of working.

The biotechnical remediation revolution has come out of a strange pollination between green pressure, legislation, economics and growing public concern.

Environmental care

Industry has found that environmental care has been 'put upon it'. Legislation, particularly through Europe, and consumer consciousness has forced industry to take account of environmental issues. Industry though is well aware that there are two sides to every situation in that company profits and the board's future are increasingly reliant on a good press.

The majority of companies, by the late 80's or early 90's had come to realise that the environment was a good handle by which they could give their image a tweak in the right direction.

It was good for industry to be perceived as 'green' (even though products such as recycled paper factories released chlorine into rivers and could not sort out their own environmental audits).

Industry, for two or three years, went through a learning curve that was almost vertical but, although it has slackened off, is still rising.

Most industries now recognise that the environment can be a 'good thing!'. By showing an interest in whales and pandas you can sell everything from cornflakes to condoms, although the company might not be totally sure what goes out of their outfall pipes.

Other ways that industry can sell itself, via the environment, is if it has a lot of waste land around a factory. Schools can be called in and the Chairman can pose with six or seven year children planting trees and shrubs - who said that child labour was extinct in this country?

Environmental awareness and the mining industry

It was Agricola in 1557 who wrote the first mining text book 'De Re Metallica' and noted mining damage to the water environment.

"The water that was used (in the Mine) poisons the brooks and streams and either destroys the fish or drives them away"

Mining has always had its effects on the natural environments, landscape and water. As an industry it has developed techniques that can be used to clean up historic waste, not just from its own history but from many other sites of contamination. Mining is intrinsically a dirty occupation in a dangerous environment and this creates a camaraderie more akin to military service. This industry has always been aware of the dangers to itself and the environment and

has, over the last twenty years put a vast effort into developing a less dangerous environment to work in.

It has also run through the methods of waste treatment by chemicals more quickly than some and has spent vast sums on research and best practice investigations.

Remediation has been treated as an exciting challenge that has paid off. The industry has taken to the buzz word 'sustainability' well before it became fashionable.

Sustainability is useful as a philosophy because it usually equates to a 'cheap' solution - inexpensive, not cheap in ideas or expertise.

CONCLUSIONS

The law as it stands does protect the mine operators, but even if the law is changed, as the NRA and the ex River Protection Boards in Scotland would like, British law is seldom retrospective.

Guilt, seldom on its proving, produces the end of a set of pollutions as we have already in this country and some foresee them to be greater in the future [12,13,14].

The future direction for all this energy would be best channelled towards a sustainable use of resources [15] that would remedy the problem using the methods that are known to the industry and are of low cost and are of maximum environmental value [16].

To create partnerships in remediation is the role the Clean Rivers Trust has taken and looks to work with industry to create positive alliances for the benefit of the water environment and the users of these important areas.

The arguments regarding changes in the law, or who is guilty are only matters at the periphery of this issue. Remediation is the issue and must not be lost sight of in the cloudy waters.

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