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POLLUTION CONTROL - Problems with enforcement

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I INTRODUCTION

Any demands made on the material resources of this earth inevitably cause pollution. Pollution is the unfavourable alteration of our surroundings, wholly or largely as a bi-product of human actions.[1] Fortunately, if the environment is not overloaded with persistent pollutants, it is, in time, self-cleansing and capable of complete recovery. However, as our population and demands grow we have an increasing moral obligation to avoid polluting the environment unnecessarily and to recognise our neighbours' rights for access to a safe and clean environment. Public opinion has shown an increasing awareness of the need to control pollution on grounds of health, of social and economic welfare, and simply for the sake of a clean environment. As a result considerable progress has been made in New Zealand towards effective control of pollution. We have much legislation which provides for control of levels of pollutants in the air, water and soil.[2]

However, although the quality of the New Zealand environment is good when compared with other countries, with the encouragement of industrial investment in this country pollution problems could increase dramatically despite the present legislative controls on pollution. There are problems already. For example, in the area of water treatment, the installation of new developments is not keeping pace with the increase in the amount of waste waters and in the degree of pollutant. Every New Zealand river upon which a town or city is situated has a pollution problem of some degree.[3]

The principle source of pollution is industrial waste. Industries can be reluctant to treat their wastes because of the generally high capital and operating costs of doing so. Therefore, it is essential that tight control be kept on pollutants in the environment and imperative that polluters be

made answerable for their actions.

> We have to force developers to recognise that they do not have the right to take free goods and services like air and water, use them, then discharge them back into the environment in a polluted state.[4]

The purpose of this paper is to examine New Zealand's present approach to pollution control. The focus, using the water and soil legislation as an illustration, is on the prosecution process and the inadequacy of this process as a means of forcing the polluter to be answerable for his or her actions. The lack of resources and lax attitude of enforcement agencies, the standing requirements which an individual must meet in order to bring an action, and problems in obtaining evidence and proving an offence lead to a lack of prosecutions and render the present system often ineffective and therefore undesirable.

II PROBLEMS WITHIN THE PRESENT APPROACH

A Diversity of Legislation

Regulation of pollution has a very long history. Early cases of torts may be found in the history of English law. For example, in William Aldred's Case[5] a landowner recovered damages from a neighbour who had intentionally placed a pig-sty upwind from the plaintiff's property. But in recent times there has been a marked tendency to bring together in a coherent fashion the many diverse parts of the law which deal with the use of natural resources and human race's relationship to the physical environment.

Pollution control is a complex matter. We are all polluters as well as sufferers from pollution and there is a government department covering every field of human endeavour. Therefore, it is not surprising that the list of legislation is long and dispersed among many government departments. (New Zealand has passed at least sixty - five pieces of legislation dealing

with pollution of one form or another. See Appendix A.)

Although it is reasonable that most departments administer some legislation dealing with the control of pollution, the diversity of legislation and of controlling bodies in itself creates a basic enforcement problem. In New Zealand, there is no legal connection between each of the various organisations with respect to pollution control. There is a need for some co-ordination of these controlling bodies. The reduction of one form of pollution not infrequently leads to an increase in another. For example, substantial pollution of a river has resulted from the imposition of requirements for reducing air pollution from a solid smokeless fuel plant. The resultant effluent was run off into the river.[6] Another reason co-ordination is needed is that although there may be an acceptable level of pollutant in each individual area, "an individually acceptable amount of water pollution, added to a tolerable amount of air pollution and combined with a variable amount of noise and congestion can produce a totally unacceptable health environment."[7]

Co-ordination would be desirable where consideration is given to the location for a proposed industry. At present an industry must make applications for approval and operating licenses to the Town Planning Authority, Health Department's section for air pollution control and Regional Water Boards. With no co-ordinated decision-making an industry could obtain approval from Town Planning to set up on a site totally undesirable in respect to air quality, for example. Some co-ordination is needed to prevent such an occurrence so that before Town Planning approval is granted there has been consultation with other agencies on the desirability of a particular factory in a particular location.

The proposed Ministry for the Environment will attempt some co-ordination in the administration of the environment.[8] However it will and should play the role of an overseer under which the various agencies would remain relatively autonomous.[9] When concerned with day to day administration of particular provisions, such as those in the Water and Soil legislation, specific expertise is required. There are licensing and control provisions which require a particular expertise and knowledge of industrial processes and pollutions control measures. This is not the role for an overview authority such as the Ministry for the Environment. The Ministry should only interfere in day to day administration if it believes provisions of some enactment are not being properly administered, or if there appears to be lax conditions in a particular area it could advise the appropriate body concerned. By remaining out of day to day administration the Ministry could give this sort of advice or persuasion. If it became involved directly the Ministry would lose that ability to view the whole scene objectively.

B The Enforcement Agencies

To be effective the present legislation requires strict enforcement, but there are problems with the enforcement agencies. D.A.R. Williams is one of those who are critical of the "regulatory efforts of administrative organisations and quazi-judical bodies in the environmental field." According to Williams their performance has been[10]

> ...Uneven and often unimpressive. Charged with administration, interpretation, and enforcement of environmental law, the organisations are often forced to operate with insufficient sanctions and grossly inadequate resources. In many cases, they lack sufficient expertise for prompt analysis of complex and highly technical issues. Often indifference, misinformation, or lack of adequate preparation leads to an embarrassingly poor response to matters of serious public concern. In some cases there appears to be a tendency for administrative agencies to become unduly influenced by the various interests they were intended to regulate.

Much of Williams' criticism is valid. The situation has improved since the statement was made in 1980 but there are still major problems.

The Water and Soil legislation needs qualified people to clasify the waters[11] initially and police and administer the classifications imposed. The enforcement of effluent standards depends on the attitudes and vigilance of these regulatory bodies. Regional Water Boards (RWB's) are charged with this enforcement. But as Williams points out these are problems with such agencies.

The Water and Soil legislation was enacted in 1967. The enforcement of the Act requires knowledge of the compositions of effluent, and therefore effluent monitoring is required. But a study of RWB's[12] nearly ten years after enactment of the legislation showed only one water board in the North Island claimed to have a full inventory of actual discharges. The majority of RWB's questioned had not processed discharge applications since 1968 and generally they felt that those which had been processed were only a small percentage of total discharges. Furthermore, very few applications for discharge rights were rejected, and only half the boards questioned did regular checks of effluents. Finally, the average number of employers of RWBs was three, plus some part time assistance. The whole of the North Island was dependent on forty people for frontline management of which only half were involved in policing pollution. Therefore Williams was correct in his assessment of "grossly inadequate resources." Only now, nearly twenty years after the enactment of the legislation, is the Water and Soil Division implementing a national monitoring system which will sample streams and locations on a regular basis. This will give an indication of base levels of pollutants and water quality on a continuing basis. However this too is limited through lack of resources. Lack of money limits the number of sites that can be monitored on a regular basis

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so initially monitoring will be limited to major rivers and lakes.

The manpower shortage has improved. According to the Water and Soil Division few boards are struggling to get appropriate staff. Williams suggested part of the problem was a lack of sufficient expertise. However, this could have been avoided. The RWB's began from a "nil base" when they started operation. It takes time to build up experience and expertise, but over the last ten years this experience has developed to a point where those water resources officers have the necessary "expertise for prompt analysis of complex and highly technical issues." Consequently they have the ability to construct a good case should prosecution result.

However, despite the growth in experience and expertise of those involved in frontline policing of pollution, many polluters are not prosecuted. This is because the decision to prosecute rests with those who could possibly be the people whom the legislation was intended to regulate. The right to use water is vested in the Crown.[13] The Minister of Works is responsible for natural water but RWB's are delegated the responsibility of looking after particular regions.[14] RWB's consist of local authority personnel. For example the Wellington Regional Water Board consists of nineteen persons appointed from the councils making up the region.[15] Four persons are appointed by the Wellington City Council, two by the Lower Hutt City Council and one each from the Porirua, Upper Hutt, Petone, Tawa, Eastbourne, Hutt and Horowhenua County Councils. Members from these bodies may also be appointed to drainage boards. Therefore there is a possibility of a RWB member also sitting on the local authority and drainage board. This situation inevitably creates conflict as some of the worst polluters are local authorities. Sewerage systems and drains into which industries discharge are controlled by local authorities and drainage boards. (Few industries have rights to discharge directly into natural water.)

Therefore the situation can arise where polluters are sitting in judgement of their own case. Members of local authorities would be reluctant to prosecute themselves.

There can also be a reluctance to invoke the criminal law when it involves council members prosecuting their own ratepayers. This is especially so if the alleged offender has considerable economic "muscle" and provides jobs in the community.

Therefore this system, which places the responsibility of prosecuting the polluter at a local body political level,can lead to a "tendency for administrative agencies to become unduly influenced by the various interests they were intended to regulate." As a result their performance is often "uneven and unimpressive." For example in Minister of Lands v Bay of Plenty Regional Water Board[16] the court noted that the respondent was content to allow breach of a discharge right which the respondent had itself imposed.

In theory,agencies charged with the enforcement of environmental legislation, such as Regional Water Boards, are autonomous bodies. However, in practice they often suffer from conflict of interests of their constituent members. This is much to the frustration of their employees who are charged with the "frontline" policing of pollution; those who prepare cases for prosecutions which do not eventuate. This lack of enforcement by prosecution is also to the detriment of the environment they are there to protect.

Possible improvements

1. Officials such as RWB officials should be obliged to investigate alleged offences and obliged to commence legal proceedings where a breach is discovered. Investigators who wilfully fail to perform

their legal duties should also be liable to penalties.

This proposal would be too extreme. Some discretion is needed. For example, a prosecution followed by conviction would serve no purpose where there was an accidental discharge into natural water, where there was no alternative and all reasonable care was taken to prevent it. For example, there has been much debate as to whether the Rotorua District Council should be prosecuted because it breached water right conditions regarding Lake Rotorua. The lake is in a serious condition and there are demands on a national scene to clear it up. The Rotorua District Council is proceeding with major expenditure to treat its waste. The Council is doing all it can because the only long term solution is to remove the effluent from the Lake completely. It could never be made acceptable because it is such a small body of receiving water. The Council could be prosecuted, but all that would do is divert attention into the legal process and create animosity amongst the people who must work together to solve the problem. It would also add to the cost of what the Rotorua Council is doing. Prosecution would not stop people using their toilets and creating the effluent which is going into the lake.

Generally prosecution should be brought when:-

(a) the industry concerned has no intention of complying with conditions of a granted water right or legislation;

(b) the industry is in a downward cycle and cannot correct itself. There is a need to break that cycle. One way to break the cycle is to take that industry to Court;

(c) there is a need for justice to be seen to be done, for public relations reasons.

2. The legislation could be enforced by a government department.

The decision to prosecute would then rest with persons free from local influence and local body politicking such as that which occurs with RWBs. This is the method used to control air pollution. However, it would not be successful as a means of controlling water pollution. Water has a greater degree of 'rivalness' than air. Water abstracted for irrigation or human consumption is water that cannot be used to turn a turbine or convey or disperse liquid waste. Similarly, the use of water as a means of waste disposal will prelude its use for human consumption, without costly treatment. Water administration requires a 'weighing up' of the needs of a particular community. For example the needs of industries which provide employment for the community must be weighed against the need for clean water. This requires co-operation and input from the representatives of the community, that is, local representatives. Therefore, to divorce water pollution control from the rest of water administration would create diffulties if different agencies were responsible for different aspects of that total resource.

3. Direct public representation: public concern brought about the enactment of environmental legislation, thus public participation should continue in its enforcement. Administering bodies could be elected by the public or at least have public representation. Possibly then common property resources would be likely to be awarded a higher relative valuation and that valuation will be enhanced when the public speak from a position of influence.

This proposal would not necessarily change the situation. The potential for conflicts of interest would remain. Also, as with the previous proposal there would be the disadvantage of removing pollution control from the rest of water administration. Direct public participation

could open the way for lobbying by environmental groups, who are not necessarily the persons who should decide whether a prosecution should occur. There would be a tendency to prosecute in all cases which, as has been argued, is not always desirable.

4. Although the ideal situation would be for RWBs to be excluded of local body persons, this would be unrealistic. However when it comes to pollution enforcement a member should declare his or her interest and abstain from voting. It is not desirable that a body should sit in judgement on its own water right application or pollution offences. So, for example, if the Drainage Board is the offender the representative from that body should abstain from voting on whether a prosecution is made or not.

This procedure, coupled with an overseer role played by the Ministry for the environment may be the most viable solution. The Ministry could intervene where the RWB's discretion was exercised injudiciously and perhaps order a reconsideration in cases where, for example, there has been a blatant offence, regardless of who the offender is. However, the power to intervene would have to be limited if the Ministry was to avoid becoming involved in day to day administration. There would still be a problem where a particular member abstains from voting. Other members would still feel pressure not to prosecute a fellow member of the Board.

C Standing of the Individual

Given the inadequacy or lack of action, at times,of the statutory enforcement agencies, there is a need for the individual or environmentally concerned organisation to take action. Where a specific type of damage to the environment is prescribed by a statute which provides for a criminal penalty for offences, private prosecutions may be brought by any member of the public by instituting a private prosecution.

There are limitations on this course of action. The principal limitation is the question of'locus standi'- standing to sue. Generally, the individual must be affected by the activity in question.[17] Thus, the litigant who does not have a specific interest, but endeavours to intervene on 'public interest' grounds, has not fared well in the Courts or at the hands of the legislature.

The Courts have often adopted a restrictive approach to 'public interest' litigants. For example, in the 2, 4, 5 - T case Environmental Defence Society Inc. v Agricultural Chemicals Board[18] the plaintiff tried to challenge the Board's restrictions of the use of 2, 4, 5 - T on the grounds that they were insufficient to protect the public health and safety. Mr Justice Haslam held that the Society "can set up no breach towards itself nor any other grounds for justifying its standing"[19] He thus found on the balance of authority that the plaintiff's lacked the requisite'locus standi'.[20] However he did go on to look at English authority and said "...strong intrinsic merits may let the Court take a more lenient view of the plaintiff's deficiency in standing."[21] Therefore, it seems that should the Court consider that the plaintiff has a strong case a more lenient view may be taken on standing. But generally this is a procedural hurdle to be overcome if an individual

wishes to bring a private prosecution against the polluter.[22]

An individual without standing can also initiate an action by persuading the Attorney - General to bring an action. But the traditional view is that the Attorney - General has a complete discretion to bring or refrain from bringing an action. Indeed, the Attorney - General has the authority not only to take over but also stay a prosecution.

The Environmental Defence Society did manage to overcome these hurdles in the case of Huntly Borough v Williams.[23] The Society claimed that a number of its members used the Waikato River for recreational purposes and fishing. They claimed status to appeal on the grounds that individual members of the Society might be affected by the decision appealed against. The Board rejected this argument but nevertheless considered whether the Society's members were affected, and decided they were not. However appellants who were affected adopted evidence and submissions from the Society. Thus the Society avoided procedural difficulties by getting its evidence heard, though put on behalf of another. Nevertheless the desired result was achieved.

However, this is a limited solution and in many cases the requirements of standing will remain a difficulty for the public interest citizen to overcome.

It has been argued that the requirements of standing be abandoned all together.[24] The proposal is that the sole screening mechanism for access to the Court would, firstly be the Court's discretionary power to award costs against an unsuccessful litigant, and secondly, the private litigation costs themselves. To achieve this legislation would have to be enacted allowing any person to sue if his or her interests or the interests of the public generally are affected by the challenged acts or omissions.

There are merits in this proposal. Concerned individuals or groups would have an opportunity to challenge activity allegedly against the public interest. It may prompt the enforcement agencies into a more responsive and responsible attitude in enforcing the environmental statutory provisions. The Courts would no longer have to decide whether a litigant was entitled to participate in particular proceedings as this proposal would provide an automatic measure of sufficient interest to bring on action. That measure is the willingness of the litigant to bear the cost of his or her appearance in the litigation and to undertake the risk of an award of costs against him or her.

However, despite these advantages two factors weigh against this proposal. The first disadvantage is the difficulty of gaining evidence in environmental cases. The result of this proposal could be a number of well-meaning but ill-founded cases taking the Court's valuable time. One factor against an individual bringing an action against a polluter is that the Court's ititial question may be to ask why the appropriate enforcement agency did not think it fit to bring on action. This leads to the major reason for maintaining the restrictions of standing of an individual. The resulting number of actions may undermine the purpose of the legislature giving a discretion to enforcement agencies as to whether or not to prosecute. As was discussed earlier, prosecution is not always the appropriate answer to an instance of pollution.[25] To lessen the requirements to be met before an individual can bring on action is not necessarily for the good of the environment in the long term. Prosecution and conviction of the polluter may not always be the best solution to pollution problems.

D Prosecution

1. Burden of Proof

The burden of proof rules have an inevitable bias against the protection of the environment.[26] Those who exploit or plan to exploit a resource

almost always appear as the defendant, while the environmentally concerned agency or individuals find themselves in the positions of the plaintiff.

> The burden of proof rules can be decisive in borderline cases where the facts are not entirely clear. In the environmental field the allocation of the burden of proof and the imposition of a certain standard of proof is frequently of even greater significance because human life, or an irreversible ecological change, may well depend upon what procedural framework is adopted.27

Where an action is brought charging the defendant with the commission of a statutory offence relating to environmental damage the plaintiff is confronted at the outset by the doctrine of reasonable doubt. In addition the defendants merely have to demonstrate from the evidence the existence of facts sufficient to create a reasonable possibility that they may not be liable.[28] Thus the concerned enforcing agent or citizen for the environment has to prove all the elements of the criminal offence. Traditionally this required proof of a mental element. However that requirement has been removed as a result of action taken by the legislature. Parliament was concerned that the requirement of proving the mental element was defeating prosecutions made under environmental provisions. Consequently, the mental element was removed from these offences along with the addition of defences that all reasonable care was taken to prevent the offence.[29]

Further progress was made when the New Zealand Court of Appeal drew a distinction between what it called "truly criminal" offences and "public welfare offences", (that is, those offences aimed at the enforcement of public health and safety.) The Court held that for public welfare offences, the doing of the prohibited act prima facie imports the offence, leaving it open to a defendant to avoid liability by proving that he or she took all reasonable care.[30] Section 34 of the'Water and Soil' Conservation Act was held to be a public welfare offence of strict liability in 1984 in Hastings City Council v Simons[31] following the earlier Court of Appeal decision. However, despite the removal of the intent requirement and the

"public welfare" classification, gaining a successful prosecution remains difficult.

Section 34 of the Water and Soil Conservation Act provides an illustration of the difficulty. For the purposes of a pollution prosecution section 34 makes it an offence to discharge any waste or natural water containing waste into natural water. Establishing an offence has occurred and that it was committed by a particular defendant is not easy.

Difficulties exist in obtaining the necessary evidence, particularly in the case of an illegal discharge under section 34. The difficulty is being able to specifically define that an offence took place on a certain date or dates and what actually happened. If someone advises the authorities that a discharge has gone into a creek because there are dead fish or some other evidence, it is usually some days after the event actually happened. Actual water quality might be back to normal values, so there is a problem of remoteness of time because most offences come to notice through public complaint.

Another related difficulty is that of tracing the source of pollutant in order to identify the offender. There could even be more than one possible defendant. It may be difficult to prove one particular company is at fault when there may be multiple polluters of a river or stream. This difficulty is compounded because the definition of natural water excludes water in pipes.[32] Regional water boards only have jurisdiction over natural water. Thus, storm water systems and the like are excluded from the jurisdiction of RWBs. Very few industries have rights to discharge directly into natural water, most discharge into sewers or storm water systems. The RWB has difficulties tracing the polluter as it can only work with the end of the pipe. Of course the local authority would be in breach at the end of the pipe and one would expect them to co-operate in order

to find the offender. However, this co-operation is not always forthcoming and when it isn't the local authority should be prosecuted, but that gives rise to the difficulty discussed earlier. Persons on the RWB are also members of local authorities and therefore prosecution is unlikely to proceed.[33]

The establishment of regular monitoring will lessen the problems encountered in gaining evidence, particularly remoteness of time. But the situation would be improved if the definition of natural water was amended to exclude only water supply piplines but include storm water systems. This would give RWBs jurisdiction over storm water systems enabling speedier, and more accurate detection of polluters than at present. This is more desirable than having local authorities responsible as RWB officials have the equipment and expertise to carry out appropriate testing of water quality and so are better equipped to detect the polluter. However this would require greater resources for RWBs. Also to be effective it would need regular monitoring of all water courses to avoid the time lapse difficulty in obtaining the necessary evidence to prosecute.

Therefore even with the removal of the requirement to prove intent and the Court of Appeal position where public welfare offences are involved, there are still major difficulties to be overcome before proving an alleged act beyond reasonable doubt. Statutory bodies and concerned individuals continue to have a substantial burden to overcome in order to succeed with a criminal prosecution. At one point in time such a burden was not intolerable. There was a common law preference favouring industrial expansion and economic growth at the expense of natural resourse conservation. But today the situation is reversed and yet the burden rule remains.

2. Penalties

Statutory penalties for pollution offences are substantial. For example, an illegal discharge of effluent into natural water can bring a maximum fine of $150,000.[34] A fine of $10,000 per day may be imposed where the offence is a continuing one.[35] The Courts consider these fines an indication of the seriousness of such offences, consequently they impose fairly severe penalties on the convicted polluter.

However, despite the magnitude of these penalties they are not unbearable for an industry when compared to the price of control equipment or the costs of revamping a particular process. Many of the daily fines imposed are less than what it would cost some large industries to maintain control equipment. Therefore the statutory penalties may not deter the potential polluter and therefore encourage him or her to find alternatives to polluting the environment. An alternative method is needed, one which would encourage industry to treat pollution rather than discharging it directly into the environment.

III A NEW APPROACH TO POLLUTION CONTROL

The attitude of industry is not necessarily one of selfishness. Selfishness is not the root cause of pollution. In a market economy prices convey information about needs and priorities. At present there is no way for industry to know whether their use of the air or water is more important than other uses. Even if they strongly believe their use of the air or water for waste disposal is harmful, they have no incentive to respond to that belief. There is no price to convey this information to

industry and induce the correct behaviour. In short, one reason why the environment is abused is that people have not had to pay for it.

For example[36], an industry may want to discharge effluent into a river. The water is a common property resource, therefore the industry has no individual property owner with whom to negotiate the rights of the discharge. Under the Water and Soil Conservation Act 1967 the industry is required to apply for a water right. If the right is granted the industry is free to discharge wastes into the river and has no incentive to control pollution. The costs of pollution are not borne by the industry but passed on to others downstream, to the victims of the polluted environment. The costs become "external" to the industry and therefore are not taken fully into account.

An alternative is to use market mechanisms to persuade industry to "internalise" environmental costs, that is, provide the incentive for industry to reduce pollution by supplying the missing prices for the presently free resources. This would be consistent with the present government's desire to remove itself as much as possible from the allocation of resources and intervention and to leave the market to operate as the determinant of efficient resource allocation.[37]

Polluter Pays Principle

Ideally, the way to induce the polluter to internalise environmental costs would be to price pollution equal to the costs caused by it. The amount of harm caused by each unit of pollution would have to be ascertained to establish the appropriate price. However there are two

fundamental difficulties with this approach. First, there is no "technically correct" method of establishing the harm done by given increments of pollution. The 'value' of the environment cannot be readily measured. Secondly, there is more than one source of pollutant. Individual units of pollution may have no significant effect on the environment but cumulatively they may cause damage. Thus, how can the relative pollution prices be allocated?[38]

The Ministry for the Environment Establishment Unit introduces a Polluter Pays Principle. The suggestion is that property rights for discharge or emission of pollutants could be established and sold to industries wishing to discharge or emit pollutants into the water or air. There would be a limited number of rights but these could be traded. For example if an industry could reduce the limit of its discharge through treatment it could sell a portion of its discharge rights to another industry. (This method would require determination of the total acceptable limits of pollution that the environment could sustain. This is no easy task, but it is possible and is already done as basis for control under present legislation.)

This method could be criticised as a licence to pollute or a means for the rich to pollute. However economic instruments linked to regulations could provide an incentive to polluters to reduce emissions and develop less polluting products and technologies. For example, taxation on pollution could be introduced.[39] Effluent charges could be imposed on each unit of pollution released by industry into the air or water and each unit of those common property resources used by industry. This would provide industry with the incentive to reduce pollution, in order

to lower their tax burden. The industry would compare the cost of paying the effluent charge with the cost of cleaning up pollution to the point where the additional cost of removal was greater than the effluent charge. The effect of this would be that types of products whose manufacture required a lot of pollution would become more expensive and would carry higher prices than those that generated less pollution. Consumers would be induced to buy the latter. They would switch from those goods which increase the price, to other less polluting and therefore less costly substitutes.

It may be argued that large manufacturers would simply pass on the effluent charge to their customers and not make the effort to clean up pollution. However effluent charges and taxes could be set high enough so that the cost of removing a substantial amount of pollution is less than the cost of paying the charges. Industries would reduce costs by reducing pollution just as they lower costs by reducing the amount of labour used per unit of output. Industries do not as a rule pass up opportunities to cut production costs. A substantial effluent charge will induce a reduction of pollution as it becomes a way for industry to cut costs.

The current regulatory approach provides no incentive to reduce pollution beyond the required levels, in fact there is a positive incentive not to. Additonal reduction is costly and therefore lowers profit. With effluent charges and tradeable rights industries pay for every unit of pollution they have not removed. Thus there is a continuing incentive to devote research and engineering toward finding less costly ways of achieving still further reductions.

Therefore the polluter pays principle would 'internalise' environmental costs and represents a mechanism for bringing true market forces to bear in service of environmental goals.

IV SUMMARY

The major trend has been to involve environmental responsibilities in comprehensive statutory codes. In theory New Zealand has sufficient existing legislation for the control of all forms of pollution. We have statutes requlating the use and pollution of land, water and air. However, there are many problems with the current regulatory approach which has prosecution as a means of ensuring polluters are made to answer for their actions. Consequently the legislation is not being adequately enforced and therefore the desirable objectives of this legislation are not being achieved. The proposed changes outlined may improve the situation but they do not provide a complete remedy. A new approach is needed.

If industries were made to pay for the resources they pollute they may seek means to control pollution. As Dr. Cullen emphasised;

> we have to force developers to recognise that they do not have the right to take free goods and services like air and water, use them, then discharge them back into the environment in a polluted state.

The answer may be to make those 'free' resources 'unfree'. If pollution was to cost industry, then that may provide the incentive to reduce pollution.

LEGISLATION CONCERNED WITH THE CONTROL OF POLLUTION

AIR

Health Act 1956
Air Pollution Regulations 1957
Chemical Works Order 1960
Smoke Restriction Regulations 1964
Radioactive Substances Act 1949
Radiation Protection Regulations 1951
Town and Country Planning Act 1953
Town and Country Planning Regulations 1960
Traffic Regulations 1956
Clean Air Act 1972
Noise Control Act 1982

LAND

Municipal Corporations Act 1956
Animals Act 1967
Apiaries Act 1969
Burial and Cremation Act 1964
The Introduction of Plants Act 1927
Litter Act 1968
National Parks Act 1952
Noxious Weeds Act 1950
Orchard and Garden Diseases Act 1928
The Town and Country Planning Act 1953
Agricultural Chemicals Act 1959
The Agricultural Chemicals Regulations 1968/201
Health Act 1956
Poultry Act 1968
Reserves and Domains Act 1953
Transport Act 1962
Police Offences Act 1927
Mining Act 1926
Quarries Act 1944
Land Act 1948
Nature Conservation Act 1962
Petroleum Act 1937
Noxious Animals Act 1956
Forests Act 1949
Forest Disease Control Regulations 1967
Timber Preservation Regulations 1955
Timber Floating Act 1954
Hydatids Act 1968
Stock Diseases Regulations 1937

WATER

Water and Soil Conservation Act 1967
Waters Pollution Act 1953
Waters Pollution Regulations 1963
Health Act 1956
Wildlife Act 1953
Fisheries Act 1908
Harbours Act 1950
Counties Act 1956
Municipal Corporations Act 1954
Mining Act 1926
Underground Water Act 1953
Oil in Navigable Waters Act 1965
Whaling Industry Act 1935
Soil Conservation and Rivers Control Act 1941
Police Offences Act 1923
Petroleum Act 1937
Animals Act 1967
Crimes Act 1966
Auckland Metropolitan Drainage Act 1960 and amendment Act 1963
Christchurch Drainage Act 1951
Dunedin District Drainage and Sewage Act 1900
Hutt Valley Drainage Act 1948
North Shore Drainage Act 1963
Continental Shelf Act 1964
Stock Diseases Regulations 1937

Footnotes

1 Definition of pollution adopted by the Working Party on Pollution of the Environment. See Physical Environment Conference 1970: Reports, Papers and Proceedings p.33.

2 See for example Clean Air Act 1972, Noise Control Act 1982, Water and Soil Conservation Act 1967.

3 Ann Bell Water Pollution and its Control in New Zealand: The case for new and positive legislation. (2ed. Botany Dept, Victoria University, Wellington, 1980).

4 Hon. Dr Cullen, M.P.; N.Z. Parliamentary debates Vol. 450, 1983; 378.

5 (1611) 9 Co. Rep. 57, 77 E.R. 816.

6 See on the problem of "the transferability of pollution" Royal Commission on Environmental Pollution, Fifth Report: Air Pollution Control: An integrated Approach (1976; Cmnd 6371) paras 263 - 266.

7 Dr James Hanlon, an assistant Surgeon - General of the United States Public Health Service. Physical Environment Conference, op. cit.

8 See cl. 28(c)(iii) Environmental Bill 1986.

9 See generally Preliminary Discussion Paper - Establishment of Parliamentary Commissioner and Ministry for the Environment (1986).

10 D.A.R. Williams Environmental Law in New Zealand (1ed. Butterworths Wellington, 1980) p.6.

11 Water and Soil Conservation Act 1967, s. 26C.

12 J.W. Lello "Environmental Planning: The Case for Management" (1975) Master of Town Planning Thesis, University of Auckland.

13 Supra, n.11 s.21(1).

14 Supra, n.11 s.20.

15 Wellington Regional Water Board Act 1972, s.6.

16 (1984) 10 N.Z.T.P.A. 101.

17 See for example Rogers v Special Town and Country Planning Board [1973] 1 N.Z.L.R. 529.

18 [1973] 2 N.Z.L.R. 758.

19 Ibid. 765-766.

20 Idem.

21 Idem.

22 See generally Honourable Mr Justice Cooke "The Concept of Environmental Law - The New Zealand Law. An Overview." [1975] N.Z.L.J. 631.

23 [1974] 1 N.Z.L.R. 689.

24 D.A.R. Williams "Law and the environment: A Symposium. Environmental Law - Some recurring issues "(1976) 3 Otago L.R. 372.

25 Supra p.7.

26 Krier "Environmental Litigation and the Burden of Proof" in Baldwin and Page (Eds) Law and the Environment (Walker and Co., New York, 1970) p. 105.

27 Williams, op.cit. 385.

28 See generally Honourable Justice Mahon "Environmental Issues and the Judicial Process " [1976] N.Z.L.J. 507.

29 For example Water and Soil Conservation Amendment Act 1983, s.15. removed the 'knowledge' requirement from the definition of an offence.

30 Civil Aviation Department v Mackenzie [1983]1 N.Z.L.R. 78.

31 [1984] 2 N.Z.L.R. 502.

32 Water and Soil Conservation Act, s.2.

33 Supra. p.5.

34 Water and Soil Conservation Act 1967, s.34(3)(b).

35 Idem .

36 Taken from Parliamentary Commissioner and Ministry for the Environment Establishment Unit Policy Paper 2: The Role of Planning in a Market-led Economy (July 1986).

37 Idem.

38 See discussion on emission fees, Stewart & Krier Environmental Law and Policy (2ed. Bobbs & Merrill, New York, 1978) p.569.

39 Idem.

BIBLIOGRAPHY

Baldwin and Page (Eds) Law and the Environment (Walker and Co., New York, 1970).

Ann Bell Water Pollution and its Control in New Zealand : The case for new and positive legislation (2ed. Botany Dept., Victoria University, Wellington, 1980).

Commission for the Environment A Guide to Environmental Law in New Zealand (2ed. Brooker & Friend, Wellington, 1976).

Honourable Mr Justice Cooke "The Concept of Environmental Law - The New Zealand Law - An Overview" [1975] N.Z.L.J. 631.

J.W. Lello "Environmental Planning : The Case for Management " (1975) Master of Town Planning Thesis, University of Auckland.

Honourable Mr Justice Mahon "Environmental Issues and the Judicial Process" [1976] N.Z.L.J. 507.

Parliamentary Commissioner and Ministry for the Environment Establishment Unit Policy Paper 2: The Role of Planning in a Market-led Economy (July 1986).

Preliminary Discussion Paper - Establishment of Parliamentary Commissioner and Ministry for the Environment. (1986).

Physical Environment Conference 1970 : Reports,Papers and Proceedings

Sir Guy Powles "Environmental Control : The Rights of the Individual Citizen" [1970] N.Z.L.J. 469.

Sir Guy Powles " The Conference, the Law, and the Citizen " [1975] N.Z.L.J. 662.

Royal Commission on Environmental Pollution, Fifth Report : Air Pollution Control : An Integrated Approach (1976 ; Cmnd 6371).

Richard B. Stewart, James E. Krier Environmental Law and Policy (2ed. Bobbs & Merrill, New York, 1978).

N. G. Thom "Air Quality and the Clean Air Act 1972" [1975] N.Z.L.J. 642.

H.A. Versteeg "The International and National Response to the Problems of Marine Pollution " (1978) 3 A.U.L.R. 209.

D.A.R. Williams Environmental Law in New Zealand (Butterworths, Wellington, 1980).

D.A.R. Williams "Law and the Environment : A Symposium. Environmental Law - Some Recurring Issues " (1976) 3 Otago L.R. 372.

D.A.R. Williams "Water Quality and the Water and Soil Conservation Act 1967 " [1975] N.Z.L.J. 650.

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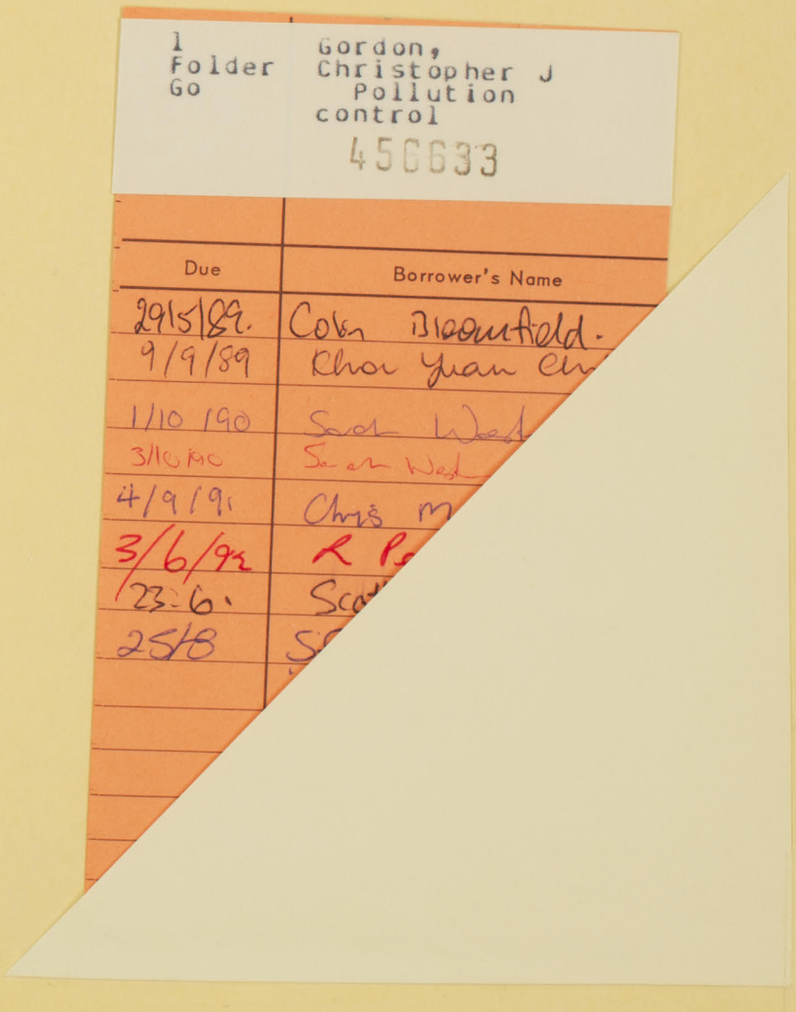

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