

**The Marine Pollution Act 1974: Is It Obsolete  
Within Six Months of Its Enactment?\***

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**Part I: INTRODUCTION**

Pollution of the sea is one of the most serious dangers facing mankind. If we continue to dump wastes into the oceans at the present rate there is a possibility of destroying much of the marine life. The consequences of this would be disastrous.

At a time of food shortages we would have destroyed one of the greatest sources of protein particularly for the less developed nations. Even worse would be the destruction of the phytoplankton which produce 60% of the world's oxygen. Earth would rapidly become a dead planet.

It is therefore apparent that all possible measures must be taken to prevent marine pollution. In New Zealand these measures are contained in the Marine Pollution Act 1974. The purpose of this paper is to determine whether the legislation will adequately protect the marine environment surrounding New Zealand and to present an alternative if it is found to be inadequate.

**Part II: THE SCIENTIFIC FACTS OF MARINE POLLUTION**

*Introduction*

To understand the legal problems of marine pollution it is first necessary to consider the physical dimensions of marine pollution. Pollutants enter the sea in two different ways: from land and from ships. Though the dumping of wastes, particularly oil, from ships has attracted a great deal of attention in recent years, it only accounts

for 10% of the oceans' contaminants.<sup>1</sup> The other 90% of the pollutants come from the land.<sup>2</sup> Though the Marine Pollution Act covers pollutants entering from both land and ships with equal effectiveness, the Act was passed largely as a response to pollution from ships.

The sea is a receptacle for a wide variety of pollutants, the bulk of them being directly discharged from land or rivers. They have been categorised by Morlais Owens and include:<sup>3</sup>

- (i) oxygen demanding wastes, e.g., domestic sewage, farm wastes and effluents from the food and drink industries;
- (ii) plant nutrients from domestic sewage, industry and agriculture;
- (iii) toxic substances which include chemicals, heavy metals, insecticides, herbicides and other toxic organic materials;
- (iv) silts, sludges, spoil from landfill operations and sediment from land erosion;
- (v) oils;
- (vi) hot water from industry and power stations; and
- (vii) radioactive materials.

These can all cause serious problems, but in respect of the marine environment some are very much worse than others. The most serious problems have been caused by oils and toxic substances, including the heavy metals, chemicals, pesticides and herbicides and other toxic organic wastes. The other pollutants have not yet reached serious proportions, though they may have had severe local effects.

#### *Non-toxic Organic Matter*

This includes categories (i), (ii) and (iv) and is mainly discharged from land or rivers. The volume of sea water is very large and has considerable oxidative capacity. Consequently the oceans have not been significantly affected by the tremendous growth in the amount of organic matter discharged by man. There are, however, areas of sea where the influx of organic matter has exceeded the oxidative capacity of the sea. This is particularly so on the coasts of the highly industrialised nations, many of which border shallow seas.

The Caspian Sea, the Baltic Sea, the Sounds between Sweden and Denmark, the Irish Sea, the North Sea and the Sea of Japan are in varying stages of entrophication.<sup>4</sup> If the unrestricted release of organic matter continues, these areas will reach complete entrophication. When

<sup>1</sup> *Time*, 29 July, 1974, 40.

<sup>2</sup> *Ibid.*

<sup>3</sup> "Water Pollution as a World Problem: The Legal, Scientific and Political Aspects" (1970) Report of a Conference held at the University College of Wales, 103. The categories were for fresh water but apply equally for sea water.

<sup>4</sup> *Ibid.*, 143-147.

this happens, the only life existing in the areas will be anerobic bacteria. This seems to have already occurred off New York where the unrestricted dumping of sewage sludge has caused the destruction of almost all animal life in the area of sea between 31 and 47 square kilometres.<sup>5</sup> In view of New Zealand's low population and its location in the Pacific Ocean, this is unlikely to become a serious problem.

### *Toxic Substances*

This category includes heavy metals, chemicals, insecticides, herbicides, other toxic organic materials and radioactive materials. These substances have similar characteristics in that they are toxic in extremely small amounts, are long-lived and are concentrated in the food chain. It has been considered by many that these materials constitute the greatest potential threat to the environment.<sup>6</sup> Already some materials in this category have caused serious problems. The problems caused by mercury, DDT and Stronium 90 are well known and these problems can only worsen with the increasing production and use of these and similar materials. Nevertheless some illustrations will more clearly indicate the seriousness of the problem. They also show that this form of pollution is largely the result of discharge from land and rivers, rather than from ships.

Among the heavy metals, mercury discharges have led to a number of serious pollution incidents.<sup>7</sup> The worst of these have occurred in Japan where the lethal effects of mercury have been shown by the Minamata disease. Several people have died as a result of eating contaminated fish and many more have suffered severe injuries. Fishing is prohibited in much of Sweden due to the mercury discharges by the pulp and paper mills. Questions have been raised in New Zealand in respect of the discharges of mercury by the pulp and paper mills at Tokoroa and Kawerau. Fish caught off the New Zealand coast have shown high levels of mercury.

Chlorinated carbon compounds, of which DDT was one of the first examples, have led to a serious decline in the numbers of some sea bird species, notably the pelican around the United States coasts. The compounds become sufficiently concentrated in the food chain so that the shells of the pelican eggs are so weak there is almost a 100% mortality rate among the eggs. Moreover, these compounds are toxic to marine organisms in extremely small quantities. *Antemia Salina* has been killed by DDT at the level of one part per 100,000 million.<sup>8</sup> The danger of these compounds to the marine environment

<sup>5</sup> *Ibid.*, 144.

<sup>6</sup> *Ibid.*, 148.

<sup>7</sup> *Ibid.*, 148.

<sup>8</sup> *Ibid.*, 148.

cannot be over-emphasised. The present advantages that many nations derive from the use of DDT and similar compounds may well be outweighed by the long term disadvantages.

Radioactive materials due to both the operation of nuclear reactors and atmospheric weapons tests have shown a marked increase in the marine environment. The release of the materials at any particular time may seem to be insignificant, but since there is an accumulative effect they can build up to dangerous levels. Certain radioactive nucleotides such as Stronium 90 and Caesium 137 have an affinity for biological compounds and therefore become incorporated into living organisms. If they reach high enough levels they can cause cancer and a general deterioration of body tissues.

The tremendous expansion in nuclear power plants will lead to greater releases of radioactive materials. Low level wastes will be discharged directly into the sea and higher level wastes will be placed in containers, many of which will be dumped into the sea. These containers could break down before the level of radioactivity in them has decreased to a safe level. There will therefore be further increases in the amounts of radioactive materials in the marine environment. Much of this material will be concentrated in the food chain due to the normal biological processes. Man is at the end of many of these food chains.

These illustrations show the extreme dangers of many of these toxic substances. It is almost certain that increasing amounts of these substances will be released into the marine environment. The future existence of mankind must be in serious jeopardy.

### *Oil*

Oil is the only pollutant where discharges by ships are more significant than discharges from land. As such it has attracted the greatest degree of international attention. This attention is also due to oil being the most visually offensive of the different types of pollutants, though its effects may not be as serious as some other forms of pollution. However, it does appear to have a greater toxicity and persistence than was first realised.

The amount of oil released into the marine environment is estimated to be 4-5 million tons and possibly as high as 10 million tons.<sup>9</sup> The greatest proportion of this is released deliberately and is not, as is popularly imagined, released in catastrophic disasters such as the "Torrey Canyon" disaster of 1967 or the "Santa Barboia Charmel" spill of 1969. Neither of these released more than 80,000 tons of oil

<sup>9</sup> M. Blumer, "Scientific Aspects of the Oil Spill Problem" (1971) 1 *Environ. Affairs* 54, 55.

but since it was concentrated in a relatively small area off densely populated coasts, they caused great damage and attracted international attention.

The magnitude of oil pollution was vividly illustrated by Thor Heyadal's voyages in the "Ra" when for 1,400 miles the Atlantic Ocean was covered by floating masses of crude oil lumps.

It is apparent that large quantities of oil and oil products are being released into the sea and despite the recent measures to limit the dumping of oil, the problem is worsening. This is largely due to the rapidly increasing volumes of oil carried at sea. The improvements in oil pollution control seem to be more than offset by the increased volume of oil carried.

The biological effects of oil are severe, far more than was originally thought. The most obvious effects of oil spills is the visible fouling of beaches and coastal waters. This visible fouling has immediate effects in the destruction of birds and marine life. Tens of thousands of birds are known to have died in the major disasters and it is estimated that for every dead bird that reaches the shore, between eight and ten are lost at sea.<sup>10</sup> These losses would not be significant in the more numerous species such as the gulls, but for the rarer species their survival could be seriously affected. Large numbers of fish and other marine organisms are immediately killed by the oil spill.

It was originally thought that these immediate effects were the total effects of oil pollution. This erroneous belief was based on the disappearance of the oil slick within a few weeks of the original spill. However, the oil continues to destroy the marine ecology once it has settled on the ocean floor or has formed an emulsion with the sea water.

A study by an interdisciplinary team of scientists of a small spill of 650-700 tons of No. 2 fuel oil has shown the very severe long term effects of oil pollution.<sup>11</sup> No. 2 fuel oil is a light, almost colourless oil and appeared to have disappeared within days of the spill. The bay seemed to have completely recovered from the effects of the spill. Prior to this study many scientists would have believed that the oil had evaporated or had been totally degraded by bacterial action. In fact the oil had settled on the bottom. It continued to kill marine organisms for several months after the original spill and had been subject to very little bacterial degradation. The oil has spread out across the bay, covering 5,000 acres, an area ten times larger than immediately after the spill. Shellfish in the area took up many of the hydrocarbons and incorporated them into the body fat. Oil can

<sup>10</sup> "Water Pollution as a World Problem", *op. cit.*, 54.

<sup>11</sup> M. Blumer, "A Small Oil Spill" (1971) 13 *Environment* 3.

therefore act in a similar manner as the persistent toxic materials such as heavy metals, DDT and radioactive materials. It is possible that oil products are as harmful to the marine environment as the most toxic of pesticides and herbicides.

Some scientists have questioned the applicability of the findings on the West Falmouth spill, noting that black crude oil is more readily degraded than white oils (refined oils).<sup>12</sup> It is nevertheless obvious that oil is one of the most dangerous pollutants being discharged into the sea.

When an oil spill has occurred, there is little man can do to eliminate the oil. The only satisfactory solution would be the complete recovery of the oil immediately after the spill. This cannot be done at present.<sup>13</sup> Only 10% of the oil spilled from the Chevron well in the Gulf of Mexico could be recovered.<sup>14</sup> Since it is impossible to recover the oil, other methods have been used to eliminate or degrade it.

Detergents and dispersants have been used to break up oil slicks. In the "Torrey Canyon" disaster these proved to be as harmful as the oil. More recently "non-toxic" dispersants have been developed. Blumer points out that in actual use all dispersant-oil mixtures are severely toxic.<sup>15</sup> The effect of dispersants is essentially aesthetic. They appear to remove the oil from the sea but have in fact dispersed the oil into the water column where it can more directly harm the marine environment. Blumer recommends that dispersants should only be used in situations where there is an extreme fire hazard.<sup>16</sup>

Sinking of the oil is favoured by some. It was used extensively by the French in dealing with the "Torrey Canyon" disaster. However, like the use of dispersants, the effect is largely cosmetic: it removes the oil from the surface of the sea but it incorporates the oil into the marine environment more effectively than by simply leaving the situation to nature.

Burning the oil would seem to be an ideal method of removing it from the marine environment. This has proved difficult in practise. It was attempted in the "Torrey Canyon" disaster and 20%-30% of the oil released was burnt. A greater degree of success has been achieved with the use of wicking agents.<sup>17</sup> Certain oils, particularly weathered crude oil, have proved to be almost impossible to burn on the sea. Thus burning of oil cannot be a complete solution.

<sup>12</sup> "Water Pollution as a World Problem", *op. cit.*, 60.

<sup>13</sup> "Scientific Aspects of the Oil Spill Problem", *loc. cit.*, 60.

<sup>14</sup> *Idem.*

<sup>15</sup> *Idem.*

<sup>16</sup> *Idem.*

<sup>17</sup> "Water Pollution as a World Problem", *op. cit.*, 66.

Containment and removal of the oil is the most desirable method of eliminating oil from the biological point of view. To be effective, however, the oil would need to be removed immediately after the spill, before it becomes mixed with the sea water. This is not possible with existing technology. Booms, barriers and scavenging equipment are only effective if the spill has occurred on calm water. Furthermore, a large proportion of the oil, particularly the more toxic portions, enters the water in solution almost immediately and thus cannot be collected.

Bacterial degradation is looked upon as being an effective method of using natural biological processes to remove oil from the marine environment. Though certain bacteria can degrade oil, this process is achieved over long periods of time and requires large amounts of oxygen. This is often not present in areas affected by oil pollution. It is a key fact of organic geochemistry that hydrocarbons survive for millions of years in aneorobic sediments until they eventually form petroleum.<sup>18</sup>

It is clear that oils and oil products are poisons that seriously damage the marine ecology and remain toxic for long periods of time. Once they enter the marine environment they are difficult if not impossible to remove from the environment. It is therefore obvious that all possible precautions should be taken to prevent the release of oil into the marine environment.

While it may be difficult to prevent many of the accidental oil spills, measures can be taken to reduce their number. More importantly, measures should be taken to ensure that oil is not deliberately released into the marine environment, this being the major source of oil pollution. The use of the "load on top" method can substantially reduce the amount of oil released into the marine environment. The effectiveness of this has been questioned and use of the clean ballast technique is seen as a more desirable method for eliminating release of oil into the marine environment. This method requires the use of special holding tanks at oil refineries and other ports. Though this may be expensive, it is far more expensive to clean up oil spills than it is to prevent spills.

### *Summary*

This brief outline of the sources of marine pollution indicates the urgent need to prevent any further pollution of the marine environment. The sea cannot continue to absorb the vast quantities of pollutants that are at present being dumped into it. The serious nature of the problem has, however, been recognised and efforts are being

<sup>18</sup> "Scientific Aspects of the Oil Spill Problem", *loc. cit.*, 60.

made both at the national and international levels to control marine pollution. The New Zealand efforts are embodied in the Marine Pollution Act.

**Part III: THE NEW ZEALAND RESPONSE TO MARINE POLLUTION:  
THE MARINE POLLUTION ACT 1974**

*Introduction*

The Marine Pollution Act was passed pursuant to a number of International Conventions, although in some respects the provisions of the Act go further than the Conventions.<sup>19</sup> These Conventions are as follows:

- (a) The International Convention for the Prevention of Pollution of the Sea by Oil, 1954 as amended in 1962, together with certain later amendments (particularly in 1969). The Convention is given effect in Part I of the Act.
- (b) The International Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972. This Convention is given effect in Part II of the Act.
- (c) The International Convention relating to Intervention on the High Seas in cases of Oil Pollution Casualties, 1969. This is given effect in Part III of the Act, which also provides for the taking of measures to deal with pollution or the threat of pollution from offshore installations and pipelines.
- (d) The International Convention on Civil Liability for Oil Pollution, 1969. This convention is enacted in Part IV of the Act.
- (e) The International Convention on the Establishment of an International Fund for the compensation of Oil Pollution Damage, 1971. Provision for this Convention is made in Part V of the Act.

The effectiveness of the Act is dependent on these International Conventions. It is therefore inherently limited, first because only the International Convention for the Prevention of Pollution of the Sea by Oil, 1954 as amended in 1962, is in force;<sup>20</sup> and secondly because these Conventions are the product of the Inter-Governmental Maritime

<sup>19</sup> Explanatory Note to the Marine Pollution Bill 1973. The Conventions were annexed to the Bill, but are not annexed to the Act. Part II of the Act was not present in the Bill when first introduced in 1972.

<sup>20</sup> (i) The 1969 Amendments were not in force, 7 January, 1974.  
 (ii) The Prevention of Marine Pollution by Dumping of Wastes Convention was not in force, 20 May, 1974.  
 (iii) The Intervention Convention was not in force, 7 January, 1974.  
 (iv) The Civil Liability Convention was not in force.  
 (v) The International Oil Fund Convention was not in force, 1 July, 1974.



Consultative Organisation (IMCO), an organisation dominated by ship owning and cargo owning States. This latter limitation has reduced the importance of the former.

The first limitation is inherent in the nature of any International Convention. Unless a Convention embodies principles of customary international law, then the Convention can only be enforced against those States which have both signed and ratified it. Even this holds true only if the Convention has come into force: that is, it has been signed and ratified by the requisite number of States provided for in the Convention.

As already stated, only the Convention for the Prevention of Oil Pollution is in force. Thus it would appear that only Part I of the Act can have any effect. Section 1(2) of the Act gives credence to this as it provides that different dates may be fixed for the coming into force of different provisions of the Act.

In reality this is not the case and the reason is found in the provisions of the various Conventions. The Conventions provide for flag state jurisdiction. Each party enforces the provisions of the Convention over their own ships and over other things which were already within their jurisdiction.<sup>21</sup> The Act therefore only covers discharges into New Zealand waters and discharges by New Zealand ships into the High Seas. It is a fundamental tenet of sovereignty that every State can make any laws and regulations it desires over things within its jurisdiction. It is clear that all ships in New Zealand waters and all New Zealand ships on the High Seas are within New Zealand's jurisdiction. Prior to 1973 there had been some doubt whether the New Zealand General Assembly had the power to make laws having effect outside New Zealand in respect of New Zealand citizens and territory. Section 2 of the New Zealand Constitution Amendment Act 1973 resolved this doubt by specifically stating that the General Assembly had the full power to make such laws.

The Act therefore has full effect except for Part V, since the Oil Fund can only come into existence once the Convention comes into force. Section 1(2) of the Act would only need to have application for Part V of the Act. That the Act would be effective despite the fact that only one of the Conventions is in force, is a direct result of the Convention being drafted under the auspices of IMCO.

The composition of the governing bodies of IMCO ensured that flag state jurisdiction would prevail. It is flag state jurisdiction that

<sup>21</sup> (i) Article VI of the Prevention of Oil Pollution Convention.  
(ii) Article VII of the Prevention of Marine Pollution by Dumping of Wastes Convention.  
(iii) Preamble to the Intervention Convention.  
(iv) Article II of the Civil Liability Convention.  
(v) Article 3 of the International Oil Fund Convention.

enables the first limitation on the effectiveness of the Act to be of no importance, but it has also meant that New Zealand cannot sufficiently protect her marine environment.

### *IMCO and the Conventions*

IMCO is a specialised agency of the United Nations. It came into being in 1958 as a result of a Convention of 1948.<sup>22</sup> It had taken ten years for 21 nations, including 7 nations with at least one million tons of shipping, to ratify the Convention to bring it into force.<sup>23</sup>

The Organisation has three governing bodies, these being the Assembly, the Council and the Maritime Safety Committee.

The Assembly consists of delegations from each member State and every member is entitled to one vote.<sup>24</sup> The Assembly has a session once every two years.<sup>25</sup>

The Council is regarded as the key body of IMCO and it dominates the Assembly.<sup>26</sup> Except when the Assembly is in session, the Council performs all the functions of IMCO other than those specifically referred to the Maritime Safety Committee by the Assembly.<sup>27</sup> As the Council is the dominant body in IMCO, its composition is of interest.

The Conference of 1948 was anxious to preserve a balance between the countries providing international shipping and the countries using international shipping. The Conference did not want the first group having measures imposed on it by the second group that would place an undue burden on shipping.<sup>28</sup>

The Council has 16 member governments. Six are governments of nations having the largest interest in providing international shipping services and six are governments of nations with the largest interest in international sea-borne trade.<sup>29</sup> These 12 governments have positions on the Council as of right. The other four member governments are elected by the Assembly: two from among the governments of nations having a substantial interest in providing international shipping services and two from among the governments of nations having a substantial interest in international sea-borne trade.<sup>30</sup>

The Council decides by a majority vote, including the concurring vote of a majority of the members on the Council concerned with the

<sup>22</sup> Bowett, *Law of International Institutions* (London, 1963) 105.

<sup>23</sup> Article 60.

<sup>24</sup> Article 13.

<sup>25</sup> Article 14.

<sup>26</sup> C. Parry, "The Inter-Governmental Maritime and Consultative Organisation" (1948) 25 B.Y.B. Int. L. 437.

<sup>27</sup> Article 27; Article 16(i).

<sup>28</sup> "The International Shipping Organisation" (1948) 2 I.L.Q. 232, 234.

<sup>29</sup> Article 17(a), (b).

<sup>30</sup> Article 17(c), (d).

particular interest, which nations have the "largest interest" or "substantial interest" in either providing international shipping services or in international sea-borne trade.<sup>31</sup> In 1960 there was a dispute over which six governments had the largest interest in providing international shipping services. Panama and Liberia maintained that they should be members of the Council as they were among the six nations with the largest tonnage of registered shipping. In an advisory opinion the International Court of Justice held that these two nations had to be members of the Council.<sup>32</sup>

Like the Council, the Maritime Safety Committee is dominated by nations with a vested interest in ensuring the free flow of international trade. Of the fourteen members of the Committee, eight shall be the largest ship owning nations.<sup>33</sup>

It is therefore apparent, due to both the functions and composition of the Council and the Maritime Safety Committee, that IMCO adheres to the traditional views on freedom of the seas. This has affected the scope of the Conventions limiting pollution of the sea.

The enforcement of the Conventions has been left to the State in which the offending vessel is registered. Many of these nations are unwilling to enforce the various provisions of the Conventions. This is most notable with the "Pan-Lib-Hon" flag of convenience jurisdictions.<sup>34</sup> Ship owners register their vessels with these three nations specifically to evade labour laws, tax laws, safety regulations and antipollution laws, yet Panama and Liberia are members of IMCO Council and Maritime Safety Committee.

It is not surprising that the dominance of IMCO by the shipping and cargo owning States and the effect of this on the various Pollution Conventions has led to conflict between these States and the coastal States. This conflict has intensified in recent years, with Canada strenuously advocating the rights of coastal States to protect their marine environment.

A view of freedom of the sea that gives each State the right to regulate discharges from their ships as they feel fit appears to be unjustifiable to a nation whose marine environment is being destroyed by pollution. It can be seen as a license to pollute.

The IMCO Conference of 1969 at Brussels indicated the degree of Canadian disenchantment with the traditional international procedures. Canada proposed that a new "victim orientated" law be created to protect the marine environment.<sup>35</sup> This was not adopted

<sup>31</sup> Article 18.

<sup>32</sup> I.C.J. Yearbook (1959-1960), 93-95.

<sup>33</sup> Article 28.

<sup>34</sup> E. Gold, "Pollution of the Sea and International Law: A Canadian Perspective" (1971-72) 3 J. Maritime Law 13, 19.

<sup>35</sup> *Ibid.*, 27.

to Canada's satisfaction. The Convention formulated by the Conference still adhered to traditional concepts of unqualified freedom of the sea. To Canada, this view of freedom of the sea completely ignored the interests of the coastal States. The Convention was therefore unacceptable to Canada. She was the sole dissenting voter on the Civil Liability Convention<sup>36</sup> and she abstained from voting on the Convention relating to Intervention on the High Seas in cases of Oil Pollution Casualties. Following this rejection of the two IMCO Conventions, Canada felt forced to take unilateral action. The significance of this action will be considered later in this paper.

New Zealand has accepted and endorsed the various Conventions, giving them statutory force in the Marine Pollution Act. In doing so, New Zealand has agreed with the traditional view of freedom of the high seas though there is now a greater awareness of the importance of being able to control the adjacent seas.<sup>37</sup>

### *New Zealand and the Conventions*

Since New Zealand jurisdiction is limited to those things which she already had jurisdiction over, what has New Zealand gained by accepting the Conventions?

New Zealand has gained the agreement of the major shipping nations to exercise their jurisdiction over their ships on the high seas in a particular manner. Contracting States have agreed to stop their ships from discharging oil and other pollutants into the high seas except under certain conditions. It is recognised in the Conventions that any country can take whatever measures it pleases to control pollution from things already within their jurisdiction.<sup>38</sup> This, however, is useless if pollution continues unabated in areas outside each country's jurisdiction. Pollutants, after all, are no respectors of international boundaries. The Convention at least established a minimum standard among the major ship owning nations for the prevention and control of marine pollution.

The agreement of New Zealand to leave the flag States to enforce the requirements of the Conventions appears to be the quid pro quo for the agreement of the major ship owning nations to limit the discharge of oil and other pollutants from their ships into the high seas which would otherwise endanger the interests of the coastal States. These nations would not have agreed to allow the coastal States to enforce the various Conventions. This would have granted coastal States a contiguous zone beyond their territorial waters over which

<sup>36</sup> Passed 34:1 with 10 abstentions.

<sup>37</sup> Mr Wilkinson, M.P., *Auckland Star*, 13 March, 1974.

<sup>38</sup> *Ante*, Fn 21.

they would have exclusive jurisdiction in respect to discharge of oil and other pollutants. The major maritime States would have seen such a zone as setting a dangerous precedent for zones of exclusive jurisdiction regulating other activities. By a process of "creeping jurisdiction" these zones would gradually acquire the characteristics of a territorial sea. This extension of the territorial sea would restrict navigation, particularly in international straits to an extent that would be unacceptable to the major maritime States.

That the New Zealand Act has more stringent requirements than the Conventions for all ships, including ships of the major maritime powers, within New Zealand waters and for New Zealand ships on the high seas, is unimportant. The fundamental point is that New Zealand jurisdiction is limited to such matters. Flag state jurisdiction, and hence freedom of the high seas, is retained.

Thus it is still true that New Zealand can do nothing about a Panamanian oil tanker discharging oil 3½ miles off the coast. We can only inform the Panamanian Government and hope that it prosecutes the offending ship. This immediately calls into question the extent of the New Zealand territorial sea. It may be better to forego the advantages to be had from supporting the Conventions and declare an extensive territorial sea, as many countries have already done. In some instances these territorial seas are as wide as 200 miles.<sup>39</sup>

However, New Zealand has not yet taken such a step. To determine fully whether New Zealand should do this, the various points of the Act and the Conventions to which they relate must be examined in greater detail.

### *Part I of the Act: Prevention of Pollution*

Part I of the Act, which gives effect to the Oil Pollution Convention, prohibits except in special circumstances discharge of oil and other pollutants from:

- (a) any place on land;<sup>40</sup>
- (b) any ship or apparatus into New Zealand waters;<sup>41</sup>
- (c) any New Zealand ship or home trade ship into any part of the sea outside New Zealand waters;<sup>42</sup>
- (d) any pipeline or installation concerned with exploration and exploitation of natural resources on the continental shelf.<sup>43</sup>

<sup>39</sup> Particularly in Latin America where 10 countries have a 200 mile territorial sea.

<sup>40</sup> Section 3(1).

<sup>41</sup> Section 3.

<sup>42</sup> Section 4.

<sup>43</sup> Section 5.

The Act permits discharges of oil and other pollutants for the purpose of securing the safety of the ship or installation, or preventing damage to the ship or cargo, or of saving life, and as a result of structural damage to the ship or installation which occurred without the negligence or deliberate act of anyone.<sup>44</sup>

Not only does the Act prohibit pollution: it also requires New Zealand ships, home trade ships and any other ships while they are in New Zealand waters to be fitted with equipment to prevent pollution.<sup>45</sup> These same ships are also required to have equipment to deal with pollution.<sup>46</sup> There are similar requirements for pipelines and offshore installations.<sup>47</sup>

Part I of the Act is considerably more stringent than the Convention. This is provided for by Article XI of the Convention which states:

Nothing in the present Convention shall be construed as derogating from the powers of any Contracting Government to take measures within its jurisdiction in respect of any matter to which the Convention relates.

The measures in Part I of the Act cover matters already within New Zealand jurisdiction. There is, however, an important exception in s. 18(1) of the Act. Regulations establishing shipping lanes, shipping traffic controls, shipping traffic control centres and shipping traffic control zones can be made to ensure the safety of navigation in New Zealand waters and in *adjacent waters*.<sup>48</sup> This is a clear departure from the rule of flag state jurisdiction. New Zealand is attempting to regulate the activities of foreign ships while they are on the high seas. Within these shipping lanes and control zones ships will be required to carry a pilot, maintain radio listening watches on prescribed frequencies, report to shipping traffic control centres, obtain a clearance to enter or leave the lane or control zone and comply with any directions given by a control centre, harbour-master, pilot or any other authorised person.<sup>49</sup> Despite this departure from the accepted theories of the law of the sea, Part I as a whole only regulates ships in New Zealand waters and New Zealand ships on the high seas.

The Convention does not require Contracting Parties to take measures as stringent as those of the New Zealand Act. The minimum requirements of the Convention as amended in 1962 are that there should be no discharges of oil within 100 miles of any coast except

<sup>44</sup> Section 6.

<sup>45</sup> Section 7.

<sup>46</sup> Section 8.

<sup>47</sup> Section 9.

<sup>48</sup> Author's emphasis.

<sup>49</sup> Section 18(3).

under certain circumstances.<sup>50</sup> These circumstances are similar to those provided in s. 6 of the New Zealand Act. The 1969 Amendments which are not yet in force put an end to unlimited discharges outside the 100 mile limits. Discharges are limited to 60 litres of oil content per mile. The Amendments also set up stricter standards for tanker construction and port facilities than did the original Convention. However, if all the Contracting Parties adopt measures similar to those of New Zealand, there would be no discharge of oil and other pollutants into the sea except in emergencies that are specifically provided for, and in accidents. The effectiveness of the New Zealand Act is dependent to some extent on the effectiveness of other States' measures.

### *Part II of the Act: Dumping of Wastes into the Sea*

Part II of the Act giving effect to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, is similar in form to Part I of the Act. It preserves flag state jurisdiction<sup>51</sup> and only covers those things over which New Zealand already had exclusive jurisdiction. Thus the Convention specifically allows each State to take stricter measures over things within its jurisdiction.<sup>52</sup> New Zealand has taken advantage of this in the Act.

The Convention prohibits the dumping of wastes or other matter except in accordance with a permit system. Waste and matter are divided into three categories. Matter in Annex I, which includes oil, DDT, aldrin, dieldrin, PCBs, mercury, cadmium and high levels radioactive matter, can only be dumped in emergencies.<sup>53</sup> Matter in Annex II, which includes wastes containing significant amounts of arsenic, lead, copper, cyanide, fluoride and low level radioactive material, can be dumped under a special permit.<sup>54</sup> Special permits can only be granted on application and special care must be taken when the waste is being dumped.<sup>55</sup> All other matter can be dumped under a general permit.<sup>56</sup>

The Convention has serious limitations. It only covers matter deliberately dumped from aircraft and ships, but not discharges occurring in the normal operation of aircraft and ships.<sup>57</sup> Dumping is permitted in order to save lives and property.<sup>58</sup> Furthermore, it

<sup>50</sup> Article III and Annex A of the Convention.

<sup>51</sup> Article VI(2).

<sup>52</sup> Article VII(5).

<sup>53</sup> Article IV(1) (a).

<sup>54</sup> Article V.

<sup>55</sup> Article VI.

<sup>56</sup> Article IV(1) (c).

<sup>57</sup> Article III.

<sup>58</sup> Article V.

does not cover discharges from land, rivers and installations concerned with exploration and exploitation of the natural resources of the continental shelf.

The Act is tougher and more comprehensive than the Convention. The Act covers:

- (a) all ships and aircraft taking on waste in New Zealand or in New Zealand waters for dumping at sea;<sup>59</sup>
- (b) all ships and aircraft dumping waste in New Zealand waters;<sup>60</sup>
- (c) New Zealand and home trade ships and aircraft dumping waste into the high seas;<sup>61</sup>
- (d) all installations situated in the sea or on the seabed under New Zealand jurisdiction.<sup>62</sup>

All of these things were already under New Zealand jurisdiction. The Act has no provision for general permits. Instead, a special permit has to be obtained for each dumping of waste or other matter.<sup>63</sup> The special permit has to specify the type of waste to be dumped, the quantity to be dumped, the method of dumping, the specific location of the dumping site, the thing to be used for the dumping, the person to be responsible for the dumping and any other conditions that the Ocean Dumping Permit Authority or Minister think fit.<sup>64</sup> The Act also sets out the criteria relating to the characteristic and composition of the waste, the characteristics of the dumping site and the method of deposit and other general considerations that should govern the dumping of waste.<sup>65</sup> There are, however, no restrictions on the disposal of waste to save life and property.<sup>66</sup>

These provisions only regulate pollution of the sea; they are not an attempt to stop it. This has been illustrated by an Auckland firm, G.K.N. Ltd. obtaining a permit to dump 30 tonnes of ferro-sulphate per week into the Hauraki Gulf. The legality of this permit must be in doubt as it was granted on 24 July 1974, seven days before the Marine Pollution Act came into force.<sup>67</sup>

As in Part I of the Act, Part II does not give New Zealand the power to regulate the disposal of wastes by a foreign ship outside the territorial sea unless the ship has taken on the waste in New Zealand or in New Zealand waters. New Zealand has to rely on the

<sup>59</sup> Section 20(a).

<sup>60</sup> Section 20(b).

<sup>61</sup> Section 20(c), (d).

<sup>62</sup> Section 20(e).

<sup>63</sup> Section 22(2).

<sup>64</sup> Section 22(7).

<sup>65</sup> Section 24.

<sup>66</sup> Section 23.

<sup>67</sup> Statutory Regulation 1974/142. The Act, except for ss. 37, 38 and 39 and Part V came into force, 1 July, 1974.



flag state to regulate the ship's discharge of the waste. The flag state is not obliged to regulate the discharge of the waste unless the Convention is in force and it is a party to it. There is no obligation at present, as the Convention is not in force.

### *Part III of the Act: Marine Casualties*

This Part of the Act gives effect to the Intervention Convention. This Convention differs from the others as it allows the coastal State to intervene in situations on the high seas. Flag state jurisdiction is pre-empted by the rights of the coastal State. This is due to the seriousness of the event for which intervention by the coastal State can take place. It has been part of customary international law, although ill defined, that a State could intervene in the case of a marine casualty posing an imminent threat of major harmful consequences.<sup>68</sup> The United Kingdom intervened in the "Torrey Canyon" disaster even though the wreck was stranded in the high seas. The United Kingdom bombed the wreck to protect her coastal interests when there was a clear and present danger of major pollution damage to those interests.

The Convention clearly defines the rights of States to intervene in marine casualties. As an initial premise the Convention declares that the right of intervention does not limit the freedom of the high seas.<sup>69</sup> In reality the Convention does limit the freedom of the high seas, although the limits are severely circumscribed. The coastal State can take any measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to the coastline or related interests from pollution or threat of pollution of the sea by oil following a marine casualty which may be reasonably expected to result in major harmful consequences.<sup>70</sup> The related interests can include coastal, port and estuarine activities such as fishing, tourist attractions and health and well-being of the coastal population.<sup>71</sup> The coastal State should only take the measures after consultation with the other States affected, particularly the flag State.<sup>72</sup> However, this may be dispensed with in cases of extreme urgency though the affected States must be informed after the measures have been taken. The measures of the coastal State must be in proportion to the damage whether actual or threatened.<sup>73</sup> In cases of disputes after the measures

<sup>68</sup> G. Curry, "Ocean Pollution" 55 being Chap. 19 in A. W. Reitze, "Environmental Planning" (1972).

<sup>69</sup> Preamble to the Convention.

<sup>70</sup> Article I.

<sup>71</sup> Article II(4).

<sup>72</sup> Article III.

<sup>73</sup> Article IV.

taken, there is a process of conciliation and arbitration.<sup>74</sup>

These limitations could be seen as unduly restricting the pre-existing customary international law, but they do have the benefit of certainty. At present, however, the Convention is not in force; thus States will still have to act in accordance with the customary international law, though the Convention may be taken as evidence of the customary law in cases of dispute over the measures taken.

The New Zealand Act goes further than the Convention. It covers casualties discharging oil and other pollutants, unlike the Convention which only covered oil.<sup>75</sup> This would probably be within the customary law as the power of intervention only exists if there is a serious risk of pollution to New Zealand waters, or coastline or other related interests.<sup>76</sup> The Act also gives powers of intervention in casualties of offshore installations and pipelines threatening pollution damage.<sup>77</sup> These things, being involved in exploration and exploitation of the continental shelf, were already within New Zealand's jurisdiction.

Part III, essentially, goes no further than the Convention. It is therefore only remedial and not preventive. The powers of intervention exist after the casualty has occurred. Aside from the provisions of s. 18 there is little that New Zealand can do under the Act to prevent casualties from occurring.

#### *Part IV of the Act: Civil Liability*

Part IV of the Act gives effect to the Convention on Civil Liability for Oil Pollution Damage. This Convention affirms the principle of international law expressed in the *Trail Smelter Arbitration* that a State cannot allow its territory to be used in a manner that damages another State without incurring liability.<sup>78</sup>

Under the Convention, liability will be incurred if oil is discharged or escapes on to the territory, including the territorial sea of a Contracting Party, causing damage.<sup>79</sup> The Convention sets out both the standard and limits of liability. The nature of the liability is strict but not absolute. The owner will not be liable if he shows that the discharge resulted from an act of war or other hostility, from the intentional act of a third party, from the negligence or wrongful act of any government or authority responsible for maintaining navigational aids, or from the act of the person suffering damage.<sup>80</sup> If the

<sup>74</sup> Annex to the Convention.

<sup>75</sup> Section 25(1).

<sup>76</sup> Section 25(2).

<sup>77</sup> Section 26.

<sup>78</sup> *United States v. Canada* (Trail Smelter Arbitration) (1938-41) 9 I.I.R. 315.

<sup>79</sup> Article II.

<sup>80</sup> Article III.

discharge does not fall within one of the above exemptions, then the owner is liable up to approximately U.S.\$134 per nett ton or up to a total of approximately U.S.\$14,112,000, whichever is the lesser amount.<sup>81</sup> This limit does not apply if the discharge is the result of actual fault on the part of the owner. Furthermore, the limitations will only apply if the owner meets a number of requirements, these being the maintenance of a liability fund, a system of comprehensive insurance, and provisions aimed at ensuring financial responsibility.<sup>82</sup> Nevertheless the limits would appear to be inadequate in view of the fact that the "Torrey Canyon" disaster caused U.S.\$20 millions worth of damage.<sup>83</sup>

The New Zealand Act departs from the provisions of the Convention to a limited degree. The Act gives rise to liability if any oil or other pollutant is discharged in contravention of the Act causing damage to New Zealand territory or New Zealand waters.<sup>84</sup> The limit and standard of liability are the same as those for the Convention except that for ships of non-contracting States liability is limited to approximately U.S.\$100.50 per ton, though there is no upper limit.<sup>85</sup> The definition of owner of ships of non-contracting States is wider than for ships of contracting States where the definition is the same as in the Convention.<sup>86</sup> The Act has specific provisions for extending civil liability to pollutants other than oil.<sup>87</sup>

New Zealand appears to gain little by giving effect to the Convention. The only advantage that could be gained for limiting her sovereignty is the agreement by the major shipping States to pay for the damage that their ships may cause. These nations have severely limited both the nature and the amount of their liability. This agreement of the major shipping powers may be of little use to New Zealand in the event of a major oil spill covering \$40 millions worth of damage and destroying rich fishing grounds outside the territorial sea. New Zealand may wish that she had not limited her sovereignty to the extent that she does in giving effect to the Convention.

#### *Part V of the Act: Additional Compensation and Indemnification*

Part V of the Act, giving effect to the Convention establishing the Compensation Fund for Oil Pollution Damage, is a supplement to Part IV of the Act. It is supposed to block up the holes in Part IV

<sup>81</sup> Article V(1).

<sup>82</sup> Articles III and VII.

<sup>83</sup> E. Gold, *loc. cit.*, 22.

<sup>84</sup> Section 30.

<sup>85</sup> Section 31.

<sup>86</sup> Section 2(1).

<sup>87</sup> Section 46.

of the Act. It cannot, however, do this job until the International Oil Pollution Compensation Fund comes into existence. This will not happen until the Convention is in force.<sup>88</sup> At the moment, therefore, Part V is merely a statement of intention. There will be no additional compensation until the Oil Fund is established.

When the Oil Fund is established, it will provide compensation for damage where there is no liability under the provisions of the Civil Liability Convention, or where the damage exceeds the payment made under the Civil Liability Convention.<sup>89</sup> There is an upper limit to the compensation payable from the Oil Fund though the limit is nearly U.S.\$60 million.<sup>90</sup> The compensation payable from the Oil Fund is limited to damage suffered in the territory on territorial waters.<sup>91</sup> No compensation is payable if the damage has resulted from an act of war or similar hostilities.<sup>92</sup> The Fund is to be financed by levies on the consignee or importer of oil and thus cargo owners are required to bear some of the burden of protecting the marine environment.<sup>93</sup>

Since the Oil Fund will be the creation of the Convention, the New Zealand Act in Part V does not depart in any respect from the provisions of the Convention. Unlike the other parts of the Act it is not within New Zealand's exclusive jurisdiction. If it comes into existence it will be one of the most positive contributions of the various Conventions in limiting the damage caused by the discharge of oil.

#### *Part VI of the Act: Miscellaneous Provisions*

The most important of the miscellaneous provisions are those exempting certain classes of ships and aircraft from the requirements of the Act. The Act does not apply to naval ships, state-owned ships being used for non-commercial purposes and aircraft being used by the armed forces of States other than New Zealand.<sup>94</sup> These exemptions are required by all of the Conventions. In addition, the Minister can grant exemption to ships or classes of ships.<sup>95</sup> The Minister has to lay annually before Parliament a report stating the cases in which he has exercised his power and the reasons why it was exercised.<sup>96</sup> Nevertheless the Minister can grant the exemptions at his absolute discretion. It is a loophole that need not exist.

<sup>88</sup> *Ante*, Fn 21.

<sup>89</sup> Section 49(3).

<sup>90</sup> Section 49(8).

<sup>91</sup> Article 3.

<sup>92</sup> Section 49(4) (a).

<sup>93</sup> G. Curry, *op. cit.*, 58.

<sup>94</sup> Section 65.

<sup>95</sup> Section 66(1).

<sup>96</sup> Section 66(4).

### *Summary*

The Marine Pollution Act 1974, though a substantial improvement on previous legislation, must be considered as being unsuited to the needs of New Zealand. New Zealand is primarily a coastal State, a State that is extremely vulnerable to marine pollution. The Act, however, reflects the interests of the maritime States.

The purpose of the Act is to give effect to the various international Conventions. These Conventions have been largely drafted by IMCO, an organisation dominated by the ship owning and cargo owning States. Thus they reflect the interests of those States. Being maritime States, they have a vital interest in maintaining freedom of navigation on the high seas. This can only be achieved if each State has absolute jurisdiction over its ships while they are on the high seas. The Conventions rigorously protect flag state jurisdiction. The Contracting States are limited to enacting legislation for their own territorial waters and for their own ships. These are things over which every State has always had jurisdiction.

The Conventions set down standards that every Contracting State must adhere to in respect of their territorial waters and their ships. In some cases these standards are regarded as minimums which can be over-riden by more stringent controls. In others, notably the Intervention Convention, the Civil Liability Convention and the Oil Compensation Fund Convention, they are standards which must be adhered to. New Zealand has not strictly followed these rules. The provisions of s. 18 and the extension of Parts I, III and IV to cover pollutants other than oil have exceeded the Conventions in a manner not provided for in them. Nevertheless New Zealand has almost totally accepted the essential provisions of the Conventions. Except for s. 18 and the limited rights provided in Part III, New Zealand jurisdiction stops with her ships and the outer edge of the territorial sea. This has been accepted as the price to be paid for the agreement of the maritime powers to restrict pollution of the sea by their ships.

It may be very well for New Zealand to prevent pollution on its territorial seas and by New Zealand ships on the high seas, but this is little use when a Liberian oil tanker discharges 1,000 tons of oil 3.5 miles off the New Zealand coast. Our adjacent waters may be ruined, but in law we can do nothing. We can only hope that Liberia has an Act similar to New Zealand's and that the provisions of this Act will be enforced. However, while four of the five Conventions are not in force Liberia is under no obligation to have such an Act, though there must be legislation in Liberia similar to that of Part I of the Marine Pollution Act.

The point of this discussion is whether New Zealand needs to be

limited to this method of preventing pollution of the marine environment. Does New Zealand have to go through the process of signing large numbers of International Conventions, putting them into effect through legislation and hoping that other nations will also pass similar legislation within a reasonable time?

Does so much heed have to be taken of flag state jurisdiction and freedom of the high seas, or can alternative action be taken?

The following part of this paper will consider the feasible alternatives New Zealand can take in the light of what other States, notably Canada, have done: and whether such action will be acceptable in the International Community.

#### Part IV: CANADA'S RESPONSE TO MARINE POLLUTION: IS IT AN EXAMPLE FOR NEW ZEALAND TO FOLLOW?

##### *The Arctic Waters Pollution Prevention Act, 1970*

For some years Canada had stressed that stronger action against marine pollution was warranted. The "Torrey Canyon" disaster illustrated this need and in view of Canada's vulnerability to a similar disaster, Canada amended the Shipping Act in 1968.<sup>97</sup> These amendments were, however, less effective than originally proposed, due to pressure from London insurance interests.<sup>98</sup> At this stage, Canada still had hopes for strong international action at the IMCO conference of 1969. Canada was to be disappointed. Her proposals for a "victim-orientated" international law were rejected. Canada was the only dissenting voter on the Civil Liability Convention and was among the few abstaining voters on the Intervention Convention.<sup>99</sup>

In 1970 the problem of marine pollution directly visited Canada's shores. On 4 February the oil tanker "Arrow" was stranded off Nova Scotia. The wreck released thousands of tons of oil, despoiling hundreds of miles of coastline. That same year the super tanker "Manhattan" made its voyage through the North-West Passage, testing the feasibility of the route for transporting oil from the Alaske.

These events forced Canada to take action. Since her traditional support for International Conventions had given little result, Canada took unilateral action. Thus in 1970 the Arctic Waters Pollution Prevention Act was passed.<sup>100</sup> This Act came into force in August 1972, more than two years after the Act was passed, suggesting to

<sup>97</sup> Gold, *loc. cit.*, 34.

<sup>98</sup> *Ibid.*

<sup>99</sup> *Ibid.*, 27.

<sup>100</sup> Bill C-202, included in (1970) 9 Int. Legal Materials 543. At the same time Canada also passed an Act to extend the breadth of her territorial sea to 12 miles.

some writers an element of uncertainty.<sup>101</sup> This may well be the case as the Act probes the frontiers of international law.

The Act rejects the traditional notions on freedom of the high seas. Canada asserts exclusive jurisdiction over any person or ship disposing waste in a contiguous zone of up to 100 miles off the Arctic coast. If they are within this zone but outside the territorial sea, then unlike the International Conventions, and hence the New Zealand Act, the Canadian Act has pre-empted the jurisdiction of the flag state for Canada's exclusive jurisdiction.

The Act provides that there shall be no deposits of any waste from land or sea into the waters covered by the Act unless there has been specific authorisation.<sup>102</sup> Any deposit of waste that is unauthorised leads to both criminal and civil liability.

Civil liability is absolute and does not depend upon proof of fault or negligence.<sup>103</sup> The only exemption from liability is if the discharge has occurred through the conduct of a third party.<sup>104</sup> Any person involved in the exploration and exploitation of natural resources both on land and at sea, any ship owner and any cargo owner, will be liable for all damage within the 100 mile zone. Their liability covers all the clean-up costs of the government or any other person, and all the actual loss or damage suffered by any other person, but the amount will be limited by regulations.<sup>105</sup>

If criminal liability is incurred the penalties can be fines and forfeiture of the ship and its cargo.<sup>106</sup> The fines are considerably greater than those under the New Zealand Act. Any deposit of waste in violation of section 4(1) will lead to a fine of up to \$5,000 for a person and \$100,000 for a ship. Where an offence continues for more than one day it is deemed to be a separate offence every day.<sup>107</sup> Other offences include a failure to report a deposit of waste,<sup>108</sup> and offences against the regulations for the shipping safety control zones.<sup>109</sup>

The Act establishes Shipping Safety Control Zones.<sup>110</sup> These are far more extensive than the similar zones established by section 18 of the New Zealand Act. Within the zones, regulations can be made prohibiting ships from navigating unless the ships comply with standards prescribed by the regulations relating to<sup>111</sup> (a) hull and

<sup>101</sup> G. Curry, *op. cit.*, 65.

<sup>102</sup> Section 4.

<sup>103</sup> Section 7(1).

<sup>104</sup> Section 7(1).

<sup>105</sup> G. Curry, *op. cit.*, 66.

<sup>106</sup> Section 23.

<sup>107</sup> Section 18(2).

<sup>108</sup> Section 19(1).

<sup>109</sup> Section 19(2).

<sup>110</sup> Section 11.

<sup>111</sup> Section 12.

fuel tank construction, (b) machinery and navigation equipment, (c) nature and methods of propulsion, (d) manning of the ship, (e) the cargo carried, (f) the freeboard allowed, (g) the quantities of fuel, water and supplies to be carried, (h) maps and charts to be carried, (i) pilots to be carried and (j) ice conditions. Ships can be exempted from the regulations.<sup>112</sup>

Pollution Prevention Officers are created by the Act to police the provision of the Act.<sup>113</sup> Their powers are very wide and include the boarding of ships within a Shipping Safety Control Zone, the banning or detention of a ship not meeting the requirements of the regulations pertaining to ships within the Shipping Safety Control Zones, and the ordering of any ship to take part in the clean-up of any deposit of waste.<sup>114</sup>

The Act gives powers of intervention in the case of a ship within the Arctic waters that is in distress, stranded, wrecked, sunk or abandoned, and is releasing or likely to release any waste.<sup>115</sup> This power of intervention is significantly wider than the powers given in the Intervention Convention.

The fundamental difference between the Canadian Act and the New Zealand Act is that the Canadian Act is not limited to her territorial waters and her own ships. It covers all the waters in the Canadian Arctic likely to be affected by marine pollution. In doing so, the Act takes account of ecological realities.

New Zealand's hope that the parties to the various International Conventions will enforce the Conventions against their ships 3.5 miles off the New Zealand coast, may be misplaced. It would seem to be better to reject the concept of flag state jurisdiction for ships outside the territorial sea and insist on the right of exclusive jurisdiction over all ships in the waters adjacent to the territorial sea. The Canadian Act has adopted this view.

#### *The Arctic Waters Pollution Prevention Act and International Law*

While the Act makes some ecological sense, it may not be valid in international law. This is of vital importance, for if the Act is valid in international law it would seem it is essential for New Zealand to follow the Canadian lead so long as the International Conventions remain as inadequate as they are at present. Even if the validity of the Canadian Act is in doubt, New Zealand should still consider following the Canadian example.

<sup>112</sup> Section 12(2).

<sup>113</sup> Sections 14-17.

<sup>114</sup> Section 15.

<sup>115</sup> Section 13.



In order to determine the legality of the Canadian legislation it is necessary to clarify the scope of Canada's jurisdiction. The Act asserts Canada's jurisdiction in zones of up to 100 miles off the Arctic coast over any person or ship in respect of:

- (a) disposal of waste;<sup>116</sup>
- (b) specified shipping regulations.<sup>117</sup>

Canada can therefore effectively control shipping in the Arctic waters. The powers given enable Canada to control construction, navigation, cargo, manning and safety of all shipping in these waters although the intent of the Act is only to control pollution.

However, all of the traditional freedoms of the high seas remain, unless specifically derogated from by the Act. Thus there are no restrictions on fishing<sup>118</sup> or any military activity in those parts of the zone outside the fishing zone and the territorial sea. There has been no question of Canada claiming possession of the waters.<sup>119</sup> All that is being claimed is the right to control the disposal of wastes into the Arctic waters.

Nevertheless even such a contiguous zone may not be possible in international law. Canada showed her own doubts by revoking the compulsory jurisdiction of the International Court of Justice over "disputes arising out of, or concerning jurisdiction or rights claimed or exercised by Canada in respect of conservation, management or exploitation of the sea, or in respect of the prevention or control of pollution or contamination of the marine environment in marine areas adjacent to the coast of Canada".<sup>120</sup>

Within a week of the legislation being introduced into the House the United States Department of State issued a note protesting over the unilateral extension of pollution zones out to 100 miles.<sup>121</sup> The United States asserted that international law provided no basis for the proposed unilateral extension of jurisdiction as it allowed Canada to control all shipping within the zones, thus seriously limiting the freedom of the high seas. The United States did not reject the claim of a 12 mile territorial sea but stated that the action should have been taken as part of an International Treaty.

In the note of reply Canada stated that the law of the sea was undergoing steady development so that by 1970 fifty-seven States

<sup>116</sup> Sections 4-9.

<sup>117</sup> Sections 11-13.

<sup>118</sup> Fishing is covered by the Territorial Sea and Fishing Zone Amendment Act, included in (1970) 9 Int. Legal Materials 553.

<sup>119</sup> Though the Pollution Act makes no such claim Canada has acted equivocally on the question of sovereignty over the Arctic Waters.

<sup>120</sup> Canadian Declaration Concerning the Compulsory Jurisdiction of the ICJ, 2nd. paragraph, from (1970) 9 Int. Legal Materials 598, 599.

<sup>121</sup> Noted issued by the United States Department of State, *ibid.*, 605.

had established territorial seas of 12 miles or more, whereas only twenty-four States claimed a 3 mile territorial sea.<sup>122</sup> With respect to the pollution zone, Canada said it was "based on the over-riding right of self defence of coastal States to protect themselves against grave threats to their environment".<sup>123</sup> Since the traditional principles of international law concerning pollution of the sea are based on maintaining freedom of navigation for the maritime powers, Canada was forced to take unilateral action, particularly for an area of such delicate ecological nature as the Arctic. Furthermore, Canada asserted that the waters of the Arctic Archipelago had always been regarded as Canadian.<sup>124</sup> Canada accepted the United States contention that the proposed legislation would act as a precedent in other parts of the world for unilateral action in extending zones of exclusive jurisdiction, but pointed out that in view of the lack of multilateral progress such action was the only effective way of safeguarding the interests of coastal States and therefore Canada expected that other nations would take similar action.<sup>125</sup>

At the time the legislation was introduced into the House it is clear that there was some doubt as to whether the Canadian claim strictly adhered to the principles of international law, but it was obvious that international law was developing in the direction of the Canadian claim.

Since the 1930s the traditional limit of no more than 12 miles for the breadth of the territorial sea or any zone of exclusive jurisdiction had been under attack. Paradoxically it was the United States that led the attack. The most significant United States actions were the Declaration of Panama, 1939,<sup>126</sup> creating a 300 mile defence zone around the United States and the Truman Proclamation on the Continental Shelf, 1945<sup>127</sup> claiming sovereignty over the continental shelf. Various Bills introduced into Congress would have extended United States jurisdiction over fisheries on the continental shelf.<sup>128</sup> Roosevelt had proposed making the Gulf of Mexico a private United States-Mexico sea in 1943.<sup>129</sup>

By the 1950s the United States had reversed its thinking and advocated the narrowest possible jurisdiction for coastal States. This

<sup>122</sup> Note of reply issued by Canada, *ibid.*, 607, 609.

<sup>123</sup> *Ibid.*, 610.

<sup>124</sup> *Ibid.*, 613.

<sup>125</sup> *Ibid.*, 615.

<sup>126</sup> (1939) 5 Foreign Relations U.S., 29 from D. C. Loring "Peru—U.S. Fisheries Dispute" (1971) 23 Stanford Law Review 391, 399.

<sup>127</sup> 1945 Proclamation No. 2668 3 C.F.R., from Loring, *loc. cit.*, 397.

<sup>128</sup> Parts of the U.S. continental shelf extend further than 200 miles.

<sup>129</sup> Memorandum from President Roosevelt to Secretary of State Hull, from Loring, *loc. cit.*, 397.

change was the result of the United States becoming the most powerful maritime State. However, her actions were used as precedents by various nations, particularly those of Latin America. Mexico established a conservation zone in 1945 which was recognised by the United States in 1946.<sup>130</sup> Argentina established a similar zone in 1946.<sup>131</sup> In 1947 Chile claimed a fisheries zone of 200 miles<sup>132</sup> and was followed by Peru in the same year.<sup>133</sup> At this point the United States protested, claiming Peru had not recognised United States rights.<sup>134</sup> The United States did not condemn the zone altogether but stated that recognition must be given to any fishery interests of nationals of the United States which exist in such areas.

Between 1947 and 1972 ten more nations claimed a 200 mile jurisdiction. Some of these claims are over territorial seas, others are fishery zones. The legal basis for these claims largely rests on the existence of a special body of inter-regional international law applicable only to Latin America.

The evidence for this is State practice and a declaration of the Organisation of American States. In 1956 the legal body of the Organisation declared as an "expression of the juridical conscience of the continent, each State is competent to establish its territorial sea within reasonable limits taking into account geographical, geological and biological factors as well as the economic needs of its population and its security and defence".<sup>135</sup> This declaration was adopted with the United States being the sole dissenting voter. By 1969 a Uruguayan Senator felt confident enough to state that the 200 mile limit was "practically established as a rule of Inter-American International Law".<sup>136</sup> The United States has given the 200 mile limit a degree of recognition by making an agreement with Brazil in 1972 to limit United States shrimp fishing in the Brazilian 200 mile zone.<sup>137</sup> The Latin American claims have received considerable support from countries of the Third World, including the People's Republic of China.<sup>138</sup>

Claims of jurisdiction beyond the 12 mile limit are not limited to the Americas. Nations claiming jurisdiction beyond the 12 mile limit

<sup>130</sup> Presidential Proclamation 29 October 1945, from Loring, *loc. cit.*, 399.

<sup>131</sup> Presidential Decree 11 October 1946, from Loring, *loc. cit.*, 399.

<sup>132</sup> Loring, *loc. cit.*, 399.

<sup>133</sup> *Ibid.*, 400.

<sup>134</sup> *Idem.*

<sup>135</sup> Final Act of 3rd Meeting of the Inter-American Council of Jurists (1956) Resolution XIII. From McDougall and Burke, "The Public Order of the Ocean" (1962) 493.

<sup>136</sup> Loring, *loc. cit.*, 418.

<sup>137</sup> F. M. Auburn, "A New Zealand 200-Mile Fishery Zone" (1972) Recent Law 221.

<sup>138</sup> *Ibid.*

include South Korea,<sup>139</sup> both Vietnams,<sup>140</sup> Ghana,<sup>141</sup> Guinea,<sup>142</sup> India,<sup>143</sup> Ceylon,<sup>144</sup> Pakistan,<sup>145</sup> China,<sup>146</sup> and Iceland.<sup>147</sup>

The case of Iceland is particularly interesting. Iceland began to enforce a 50 mile fishery zone on 1 September 1972.<sup>148</sup> The United Kingdom and West Germany instituted proceedings in the International Court of Justice. Judgment on the merits of the case between Iceland and West Germany was delivered on 25 July 1974.<sup>149</sup> By ten votes to four the Court held that Iceland could not unilaterally exclude West Germany from fishing within the zone. The Court did, however, recognise that Iceland should have preferential rights, but these rights would not exclude the established rights of West Germany or other rights of other States in a similar position as West Germany. Thus the International Court of Justice is prepared to recognise that States can exercise jurisdiction to some degree with regard to fisheries in the adjacent seas outside the 12 mile limit.

The 1974 United Nations Conference on the Law of the Sea has the unanimous agreement of all those taking part that there should be some form of exclusive jurisdiction beyond the 12 mile limit.<sup>150</sup> The United States, one of the main supporters for freedom of navigation, argues that coastal States be given a 12 mile territorial sea and a 200 mile wide economic zone for exploitation of minerals and fish, both being contingent upon the freedom of navigation for all ships within the zone.<sup>151</sup> The United States proposals reflect the view of all the major maritime powers. The coastal States are insisting on a more extensive jurisdiction over the 200 mile zone.

It is therefore apparent that customary international law based on State practice has developed to the point where coastal States can be reasonably certain they are entitled to some form of jurisdiction beyond the 12 mile limit. Though the legality of the Canadian Act was in doubt in 1970, the development of international law since then is an affirmation of the legality of the Act.

<sup>139</sup> Fishing Zone 20-200 miles from W. F. Foster, "New Zealand and the Fishing Zone Concept" (1967) 165. Unpublished LL.B. (Hons) dissertation, Auckland.

<sup>140</sup> Sth. Vietnam Fishery Zone 20 Km., Nth. Vietnam Fishery Zone 20-200 Km. from Foster, *ibid.*, 168.

<sup>141</sup> President authorised to establish Fishery Zone of up to 100 miles.

<sup>142</sup> 130 mile territorial sea, from Foster, *ibid.*, 164.

<sup>143</sup> 100 mile Fishery Zone (1956).

<sup>144</sup> 100 mile Fishery Zone (1957). Ceylon used the Indian decree as precedent.

<sup>145</sup> Pakistan did the same in 1966.

<sup>146</sup> Fishery Zone beyond 12 miles on the Sino-Korean border. Agreement between Japan and China that Japan could fish in the zone, from Tao Cheng "Communist China and the Laws of the Sea" (1969) 63 A.J.I.L. 47.

<sup>147</sup> 50 mile Fishery Zone.

<sup>148</sup> F. M. Auburn, *loc. cit.*, 222.

<sup>149</sup> International Court of Justice Communique No. 74/10, 25 July 1974.

<sup>150</sup> *Time*, 29 July 1974, 37.

<sup>151</sup> *Ibid.*, 40.

*The Alternatives for New Zealand*

Since the Canadian Act has achieved a considerable degree of legitimacy in international law, New Zealand is no longer limited to her territorial sea, and her ships, when trying to control and prevent marine pollution. However, while the Law of the Sea Conference is in progress it would be undesirable to take any further measures beyond these already in existence. If the Conference does not produce a satisfactory means of allowing the coastal States to control marine pollution, then further action must be considered. There are three main alternatives.

New Zealand can continue with the present Marine Pollution Act and press for amendments to the existing International Convention to give the coastal States greater powers for controlling and preventing pollution of the adjacent seas. Though the previous attempts at this, particularly by Canada, achieved little, an unsuccessful Law of the Sea Conference could provide the impetus for such measures being adopted by New Zealand. The problem with this course of action is that even if the proposed amendments were adopted it would be many years before they came into force, and until they covered things already within New Zealand's jurisdiction or embodied customary international law, they could not be given effect until they came into force.

Secondly, New Zealand could amend the Act so that it covers the waters adjacent to the territorial sea. Section 18 of the Act already does this. Such action, provided the contiguous zone was not an unreasonable width, would be supported by the present trends in international law previously discussed. Freedom of navigation would be relatively unimpaired, yet New Zealand would be able to control marine pollution in the adjacent waters to a considerable degree. It would be more acceptable in the International Community, but less effective than the final alternative.

The final alternative would be the repeal of the Marine Pollution Act and the substitution of an Act on the lines of the Canadian Act. The contiguous zone would be no wider than in the second alternative, but the powers would be much greater. If they were effectively utilised it would be possible to prevent almost all pollution of the marine environment. In doing so, New Zealand would be severely restricting freedom of navigation. There is, however, considerable support in international law for such legislation.

It seems obvious that the most desirable alternative is the last. By the unilateral implementation of measures based on the Canadian Act it would not be necessary to wait until IMCO is convinced of the need for more stringent measures to prevent and control marine

pollution. New Zealand action on these lines would attract considerable criticism from the maritime States, but the progressive development of international law supports such action. This being so, New Zealand must seriously consider taking this action if the present Marine Pollution Act proves to be ineffective.

#### Part V: CONCLUSION

The existing Marine Pollution Act 1974 is a significant advance over previous legislation, but it is limited to those things over which New Zealand has always had jurisdiction and this is the fundamental weakness of the Act. New Zealand's jurisdiction is basically limited to her own territory, but pollutants unfortunately do not respect political boundaries. The Act does not take into account ecological realities. The Act will therefore not be able to effectively control and prevent marine pollution.

New Zealand has to rely on the measures of other States to control and prevent pollution from their ships while they are outside the territorial sea but in the adjacent waters. This is an absurd situation. Since four of the five Conventions are not in force, these States do not even need to have any measures other than those of the Oil Pollution Prevention Convention, 1954 as amended in 1962. New Zealand therefore has to take unilateral action to protect the marine environment of the adjacent seas. International law will support such action. New Zealand must accept her responsibility to the marine environment and enact legislation similar to the Arctic Waters Pollution Prevention Act.