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Oil Pollution and the Coastal State

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by

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CHAPTER I

INTRODUCTION

Marine oil pollution is a global problem of tremendously complex nature involving complicated interaction of many economic, scientific, technological, political and legal factors. No single aspect may be successfully treated in isolation.

There is little doubt concerning the relative amount of oceanic oil pollution that is currently occurring. Several recent authoritative national and international studies have estimated oil pollution from oil transportation activities alone is in excess of one million metric tons each year.[1] The annual estimate of oil discharged by all ocean-oriented petroleum operations is 1.5 to 2 million metric tons.[2] There is considerable argument as to the exact nature and magnitude of oil pollution effects on the marine environment. However the possible effects are serious and no responsible entity argues that efforts to prevent oil pollution should wait until a definitive understanding is acquired concerning all the undesirable results of such marine pollution.

Although I have already postulated that no single aspect of marine oil pollution can be successfully treated in complete isolation, it is, for practical reasons, necessary to limit

the scope of this research effort. The boundaries established are not absolute and the question posed will be such as to allow or stimulate consideration of many of the economic, technological and legal aspects previously mentioned.

It will be the purpose of this paper to pose and answer this question . . . How has the legal competence of a coastal state been strengthened with respect to that state's ability to prevent marine oil pollution? The question by implication presupposes that a certain change in legal competence is in fact occurring. The legal and historical baseline from which to gauge this gradual change will be established by reviewing past milestones in oil pollution law. A closer examination will then be made of recent evolutionary changes in both international and national oil pollution law subsequent to the Torrey Canyon Disaster of 1967. The very global nature of marine oil pollution predicates eventual conflict between national interests and existing international law. Even though the exact width of the territorial sea is as yet not established, the ubiquitous, all pervasive nature of oceanic oil pollution makes it a poor observer of man made boundaries and a difficult subject for man made laws as well.

CHAPTER II

HISTORICAL BACKGROUND

At 8:50 Saturday morning, 18 March 1967, the tanker Torrey Canyon ran aground on Seven Stones Reef about 16 miles west of Lands End, England. In addition to being a bonafide navigational landmark, these Seven Stones proved to be a legal milestone in the evolution of new marine oil pollution law. The legal impact of this supertanker grounding and subsequent oil pollution of massive scale brought home in dramatic fashion the truly inadequate nature of existing international oil pollution law. In a matter of days approximately 100,000 tons of crude oil were released from the mortally damaged tanker hull.[1] This was the largest single oil spill in maritime history. The international nature of the problem was obvious. The ship was owned by a Bermudian corporation registered in Liberia under long-term charter to a U.S. company and subchartered for that voyage to a British firm. The Master and crew were Italian and a Dutch salvage company was later involved. French and British property was extensively damaged and both countries incurred tremendous expenses. Finally the ship went aground in international waters. In such circumstances, who is responsible, who can take remedial action, who pays the bill? Neither international or national law could provide adequate answers to these and many other pertinent

questions. Advances in technology frequently dictate changes in the provisions of existing law but in general a major disaster is required to generate the motive power of public opinion needed to initiate substantive changes. To understand the many and often controversial changes that occurred in both international and national oil pollution law subsequent to the Torrey Canyon incident, one must first have a reasonable familiarity with the earlier development of marine oil pollution law.

Why is oil pollution a matter of international concern? Because oil pollution is potentially harmful to many beneficial uses of the oceans and its regulation affects man's historical free use of the sea. We have recently reached that point in time where freedom of the seas is being challenged because it is being interpreted by some as license to pollute or at least to risk marine pollution. How did we get to this point?

General concern for oceanic oil pollution appears to have originated during the decade following World War I. Both the United States and the League of Nations attempted to obtain international agreement on means of preventing oceanic oil pollution.[2] The United States enacted an Oil Pollution Act in 1924 and two years later chaired an international conference on oil pollution in Washington. This conference was the first international effort to discuss the technical and legal problems

of oil pollution in any detail. It resulted in the first International Convention Relating to Oil Pollution which was however never ratified by any participating nation. A similarly unsuccessful effort was mounted in the League of Nations.

The many torpedoed and otherwise damaged tankers of the U.S. Atlantic coast during World War II demonstrated the hazards of oil pollution. The ever increasing need for petroleum products in a burgeoning world economy further emphasized the need for some form of international control. Little was accomplished until 1954 when the International Convention for the Prevention of Oil Pollution was concluded in London. This Convention became effective when ratified by the requisite number of nations on 26 July 1958. It prohibits tankers and other ships (with certain exemptions) from discharging oil or oily mixtures within 50 miles of the nearest land or within any of several 50 or 100 mile-wide geographic prohibited zones delineated in Annex A of the Convention. Article III of this Convention provided that any contravention of these prohibitions "shall be an offense punishable under the laws of the territory in which the ship is registered."[3] Application or enforcement of the original 1954 Convention is therefore left strictly to the flag state of the offending ship.[4] Many participating countries including the U.S. were not satisfied with this Convention and ratification was in some cases a slow process. With certain reservations it was accepted by the U.S.

Senate in May 1961 and with the enactment of Senate Bill 2187, became the Oil Pollution Act of 1961. The U.S. reservation concerned oil pollution offenses within its territorial waters which the U.S. contended should still be subject to existing U.S. law (Oil Pollution Act of 1924). Also the U.S. would not be compelled to finance oily waste disposal facilities ashore although it would urge port authorities and private contractors to provide such facilities when existing capability was found inadequate.

Although the 1954 Convention and subsequent national implementing legislation had many failings, they did result in the first mandatory shipboard record of oil and oily waste disposal. The "Oil Record Book" specified in Annex B of the Convention required a detailed accounting of all ballasting, deballasting and cleaning of both cargo oil and bunker fuel tanks. The record book was then to be signed by the officer in charge of the operation being reported and the ships's Master. The oil record book was to be made available to the authorities of any contracting state when the ship in question was within a port of that state. Violations of various provisions of the Convention including false or inaccurate statements in the oil record book could result in fines from $100 to $2500, revocation of license for ships' officers and up to six months imprisonment. The 1954 Convention as adopted by many signatory nations depended very heavily on these participating states for enforcement. There was little uniformity

of fines or penalties and consequently little real uniformity of enforcement on an international basis. The basic complaint of coastal states was that this convention was heavily slanted in favor of ship and cargo owners' interests and did considerably less to protect the interests of the coastal state. The law was corrective or remedial in nature and not really preventive. Although the Convention was strengthened somewhat by amendment in 1962, which provided a more realistic definition of oil pollution and extended some prohibited zones, the law remains essentially ineffective in a preventive sense. Even within the territorial waters enforcement by a coastal state is fraught with many almost insurmountable difficulties. Detection and proof of violation are a serious problem. It's not that the coastal state lacks the authority to enforce the law immediately adjacent to her coast. The 1958 Convention on the Territorial Sea and the Contiguous Zone requires foreign vessels exercising the right of innocent passage to comply "with the laws and regulations enacted by the coastal state in conformity with these articles and other rules of international law."[5] But unless the offending ship is caught in the act of discharging oil within the territorial sea, it is almost impossible to invoke the limited provisions of the Convention. And what of oil discharged just outside the national limits of a coastal state's jurisdiction? This is clearly a matter for the flag state to take the required corrective

action if the damaged state has all the needed evidence. Actual aerial photographs of a ship discharging oily waste have in several cases not constituted sufficient evidence because they were not accompanied by a sample of the liquid retrieved in the ship's wake.* Both the 1954 Conference and the amending Conference in 1962 recognized this problem of enforcement and attached to their Convention a Resolution which states in part . . . "The only entirely effective method known of preventing oil pollution is the complete avoidance of the discharge of persistent oils into the sea and . . . measures are possible [now] which would enable this to be substantially achieved."[6]

One must recognize that this discussion centers thus far on prohibiting only intentional or inadvertent discharges of oil and oily waste within certain geographic zones. For instance oil released as a result of a marine casualty would not be a violation of the 1954 Convention. The question of pollution of the open ocean beyond national jurisdiction was also considered in the 1958 Geneva Law of the Sea Conference. Article 24 of the Convention on the High Seas provided that "Every state shall draw up regulations to prevent pollution of the seas by the discharge of oil by ships or pipe-lines or

*The Convention specifies that to be considered oily waste, the oil content of the discharge must exceed 100 parts per million.

resulting from the exploitation of the sea bed and its subsoil taking account of existing treaty provisions on the subject."

This then was the status of oil pollution law when the Torrey Canyon grounded. The law simply did not anticipate such a massive oil spill disaster, although several coastal countries attempted earlier to deal with liability for open ocean marine casualties. The overwhelming power and influence of shipping and oil company interests had managed to delay substantive liability legislation to govern international oil pollution from either accidential or negligent causes.

CHAPTER III

COASTAL STATE'S DILEMMA

Let's look more closely at the legal problem marine oil pollution poses for the coastal state. What is it that dictates a need for legal protection from marine oil pollution and how may the coastal state achieve such protection? To acquire legal protection one must have a legal complaint. The concept and definition of marine pollution is certainly the starting point needed as a basis for any anti-pollution legislation and subsequent regulation enforcement. In the narrowest sense any alteration of the natural quality of sea water would be marine pollution, but this approach would remove one of the valuable uses of the ocean, i.e., its quite useful assimulative capability. A more practical definition and one generally agreed upon would be any measurable alteration of the marine environment (or sea water quality) which detrimentally alters any of the products, resources or marine life beneficially used by man. There are several compelling reasons for defining marine pollution in terms of injury to the beneficial uses of the marine environment. For our purposes the most pertinent of these is the legal precedent which established that international law may be interpreted as imposing liability for extraterritorial damage only in cases of injury to beneficial uses.[1] The Trail Smelter case settled in 1938 involved extraterritorial air

pollution and has been the primary legal precedent for establishing the liability of one nation-state for causing injurious pollution (of air or water) to another state. The decision in this case between the U.S. and Canada has been interpreted as imposing a duty upon one nation to prevent injuries to the beneficial uses of the air or water of a neighboring state.[2]

Should the state move unilaterally to prevent harm to its coastal environment or should it depend upon the evolution of international law to take care of its national interests in this regard? There has in recent years, particularly since the Torrey Canyon incident, been great differences of national legal opinion on this question. These differences have been many and varied. Undeniably the slow rate at which effective action has been taken internationally has favored unilateral legislation. However, the biggest stumbling block to international progress in the formulation of effective marine pollution law has been the dissatisfaction of the coastal state with the legal interpretation of the word liability itself. The shipping and cargo-owning interests favor what is called fault liability--that is, liability dependent on proving negligent responsibility or fault. The coastal interests claim that proof of fault is not germane and that the ship or cargo-owner (or both) are liable for oil spill damage no matter what the cause, simply because the damage resulted from their action or ownership. Had the oil not been there in transhipment, no

damage could have resulted. This is termed Strict or Absolute Liability. After the Torrey Canyon grounding it was widely recognized that from the coastal state's viewpoint the amended London Oil Pollution Convention of 1954 was almost totally inadequate as to both scope and enforcement. A particularly strong opinion was voiced by many coastal nations concerning the need to allow the coastal state to take early action to prevent oil pollution damage to their coasts when an oil spill occurred outside of their territorial waters.

Shortly after the Torry Canyon grounded, British Prime Minister Harold Wilson called upon the United Nations Intergovernmental Maritime Consultive Organization (IMCO) to meet in extraordinary session to consider possible changes in international maritime law.[3] As a direct result of IMCO's study the International Legal Conference on Marine Pollution Damage was convened in Brussels on 10 November 1969 with 54 nations represented. This Conference produced two significant new Conventions on marine oil pollution: The International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties and the International Convention on Civil Liability for Oil Pollution Damage.[4] These Conventions attempted to address two basic inadequacies of existing law: How to cope with an oil pollution threat that originates in international waters and how to establish liability and provide funding to redress oil pollution damage.

The first convention mentioned, commonly referred to as the "Intervention Convention", allows any state following a maritime casualty on the high seas to take such action as may be necessary to prevent, mitigate or eliminate grave or imminent danger to their coastline or related interests from pollution or the threat of pollution of the sea by oil. This convention further allows a coastal state to take any action proportionate to the pollution damage, actual or threatened, including the complete destruction of the oil tanker and or its cargo.[5]

The second convention, known as the "Liability Convention," provides that the owner of a tanker is liable for any pollution damage caused to a coastal state by oil discharged from his ship. Under this convention, the tanker owner may limit his liability for any single incident to $134.00 for each ton of ship's cargo oil capacity not to exceed 14 million dollars. Any tanker owner subject to this convention (18 countries signed it originally) and whose ship carries more than two thousand tons of cargo oil must maintain insurance or an equivalent fund equal to the limit of his convention liability.

Both of these conventions, when they enter into force formally, will provide fairly powerful tools to prevent or redress oil pollution damage to the coastal state. Yet there are several coastal states which are less than satisfied with the results of the 1969 Brussels Conference.

Possibly the most vocal and surely the most dramatic objection to these recent conventions has come from Canada. It is instructive to examine both Canada's objections and her unilateral legal actions to determine their validity and rationale. It is particularly pertinent from a U.S. viewpoint to understand our neighbor's actions since the U.S. maintains that Canada's unilateral extension of jurisdiction is an unacceptable infringement of the freedom of the seas.[6]

As a participant in the 1969 Brussels Conference, Canada strongly advocated a liability convention which would provide for absolute liability, compulsory insurance, and a pollution damage fund based on tanker deadweight tonnage. Canada additionally proposed that the ship owner be liable to a fixed amount for pollution damage beyond which the cargo owner would be held liable if damages had not been adequately covered.[7] The conference was deadlocked between those that favored fault liability and those that advocated absolute liability and a compromise resulted. This compromise called for a form of strict liability but with several critical exceptions. In the Canadian view, it amounted to fault liability with the burden of proof falling on the ship owner to cover the exceptions. When the marine accident does not fall within the several exceptions the ship owner is liable for oil pollution damage claims up to $134 per ton or 14 million dollars, whichever is less. This approach was built into the 1969 Brussels Liability Convention and was unacceptable to the Canadians. When

this Liability Convention came to a vote in the 1969 Conference, 34 countries approved, 10 abstained, and Canada alone cast a dissenting vote. In the words of the Canadian Secretary of State for External Affairs, Canada was opting for a "Victim Oriented" law that was designed not to support the ship owner, but to protect the overwhelming interests of the coastal state endangered by oil pollution. Canada also abstained from voting on the Brussels Intervention Convention, claiming that the reservation which required a marine accident to have "already occurred" before action could be taken was too severe a limitation. It was again in Canada's view a remedial but not a preventative proscription. Canada contended that rather than wait passively for a poorly founded tanker to have a disastrous accident, the coastal state should be able to impose certain safety standards or preconditions for tanker entry into potentially hazardous coastal areas.

Canadian concern for marine oil pollution was dramatically highlighted on 4 February 1970 when the Liberian tanker "Arrow" went aground on Cerebus Rock in Chedabucto Bay, Nova Scotia, while enroute from Venezuela with a cargo of 16,000 tons of bunker C fuel oil.[8] Despite her small size when compared to the Torrey Canyon, the "Arrow" grounding did cause extensive pollution damage to several hundred miles of Canadian coastline. On 6 February the Ministry of Transport invoked the anti-pollution provisions of the newly amended Canada Shipping

Act and ordered the tanker and her cargo destroyed.[9] The Canada Shipping Act at that time did not provide for recovery of pollution damages although it did give the Canadian government the authority to take remedial action inside its territorial waters necessary to limit damage. Cost of the required clean-up was estimated to exceed $3 million. The owners of "Arrow" were able to respond to damage claims under an existing voluntary international agreement, but only to the amount of $1.2 million.

The Arrow incident and the planned 1970 experimental Arctic Voyage of the U.S. tanker Manhatten convinced Canadian authorities that additional comprehensive marine pollution legislation was needed. This legislation would be designed to overcome all of Canadian reservations with respect to the Brussels Conventions. In particular, Canadian representatives to the Brussels Conference had advocated an International Pollution Convention which would regulate not only petroleum pollutants but all forms of potential marine pollutants. Canada's first move was taken on 7 April 1970 when her U.N. representative made written declaration that Canada would no longer be bound by the compulsory jurisdiction of the International Court of Justice in any matters concerning "the prevention or control of pollution or contamination of the marine environment in areas adjacent to the coast of Canada."[10] On the following day, Bill C-202, An Act to Prevent Pollution of

Areas of the Arctic Waters Adjacent to the Mainland and Islands of the Canadian Arctic and Bill C-203, An Act to Amend the Territorial Sea and Fishing Zones Act were introduced in the Canadian Parliament. Both bills subsequently became Canadian Law and have stirred considerable international controversy.[11] Bill C-202, later entitled Arctic Waters Pollution Prevention Act, asserted Canadian jurisdiction for purposes of pollution prevention to all waters up to 100 nautical miles from every point of Canadian land above the sixtieth parallel of north latitude. Subsequent implementing regulations by way of amendment to the Canada Shipping Act (and others) regulate vessel construction standards, safety features required, qualification of master and navigator, navigational equipment, routing requirements, etc. It is in all respects a very comprehensive law -- for instance, "waste" is defined as:

> any substance that if added to any waters would degrade or alter or form a part of a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by animal, fish or plant that is useful to man and any water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed by heat or other means, from a natural state that it would, if added to any waters, degrade or alter or form a process of degradation or alteration of the quality of those waters to an extent that is detrimental to their use by man or by any animal, fish or plant that is useful to man.[12]

Further absolute liability is the standard applied. Liability for damages resulting from disposal of wastes in the Arctic is extended to:

a. Any person who is engaged in exploring for or exploiting any natural resource on any land adjacent to Arctic waters or in any submarine area subadjacent to the Arctic waters.

b. Any person who carries on any undertaking on the mainland or islands of the Canadian Arctic or in the Arctic waters.

c. The owner of any ship that navigates within the Arctic waters and the owner or owners of the cargo of any such ship.

These persons are liable for all costs and expenses incurred by the government in preventing, correcting or repairing any resultant pollution of the Arctic

and

for all actual loss or damage incurred by any other persons.

Any of the individuals engaged in the Arctic as above described must also furnish evidence of financial responsibility.

The Governor in Council may establish what are termed Shipping Safety Control Zones within the 100 mile radius previously mentioned. In these Shipping Safety Control Zones the most complete control of transitting shipping is exercised. The regulations for this control of shipping cover hull and fuel tank construction, construction of propulsion and auxiliary machinery, steering and propulsion control equipment, the manning of the ship, maximum quantity and stowage of potentially hazardous materials or cargo, the ship's maximum freeboard, and the types and quantity of charts, tide tables and other navigational documentation to be carried.

The law further specifies the qualification and authority of implementing officials designated as "Pollution Prevention Officers."

With the passage of the Act to Amend the Territorial Sea and Fishing Zones Act, similar anti-pollution authority was extended to cover Canada's now widened territorial waters.

What is the basis for U.S. objection to the Canadian approach to preserving the fragile environment of the Arctic? Certainly little doubt exists that the Arctic environment is of a rather special and delicate nature and demands protection. The U.S. objection is not based on what would be achieved in terms of environmental protection, but rather hinges on Canada's unilateral assertion of jurisdiction over portions of oceanic real estate outside of her territorial waters. This unilateral exercise of jurisdiction over areas of the high seas is not in conformity with Article 2 of the Geneva Convention on the High Seas which states:

> The high seas being open to all nations, no state may validly purport to subject any part of them to its sovereignty.

The U.S. published statement on the Canadian Arctic Waters Pollution Prevention Act went on to say:

> The enactment and implementation of these measures would affect the exercise by the United States and other countries of the right to freedom of the seas in large areas of the high seas and would adversely affect our efforts to reach international agreement on the use of the seas. International law provides no basis for these proposed unilateral extensions of jurisdiction on the high seas, and the United States can neither accept nor acquiesce in the assertion of such jurisdiction.[13]

Canada on the other hand by way of rebuttal made a detailed reply covering many of the reasons which prompted Canada to take positive steps to prevent pollution of the Canadian Arctic waters. She made critical comment concerning several instances where, in the Canadian view, the U.S. had failed to conform to its own strict interpretation of freedom of the high seas. Allusion was made to the U.S. 1935 claim of authority to extend customs enforcement out to 62 miles, the U.S. establishment of exclusive fishery zones outside its own 3 mile territorial sea and its recently passed legislation asserting exclusive pollution control jurisdiction out to 12 miles. Canada was particularly critical of the U.S. unilateral interferences with the freedom of the high seas during nuclear tests which appropriated to U.S. use vast areas of the Pacific Ocean and could have constituted a grave peril to those who might use such areas during a test. The most significant commentary however was the statement that any danger to the environment of a state was a threat to its national security. From this standpoint the Arctic Waters Pollution Prevention Act was based on overriding and internationally recognized right of self-defense. The other linch pin in the Canadian argument was that "it is a well established principle of international law that customary international law is developed by state practice."[14] Canada cites as an outstanding example of state practice later accepted as international law, the 1945

Truman Proclamation announcing the U.S. claim to jurisdiction over their continental shelf.

In terms of bulk oil shipping, the Canadian law has yet to be tested although the law is being applied to those involved in Arctic oil exploration and exploitation.[15] The Canada Shipping Act has been amended and any commercial shipping in the Canadian Arctic will certainly be affected. Large scale exploration is being conducted in the Canadian Arctic by American, Canadian, British, French and German oil interests.[16] It is only a matter of time before the volume of proven oil reserves makes large scale shipment of Arctic oil a reality.

CHAPTER IV

ENDS VERSUS MEANS -- A PROPOSAL

The Brussels Conventions have been emulated in national anti-pollution legislation by several states including the United States.[1] Both NATO and the United States have strongly advocated a total ban on tanker flushing at sea by 1975.[2] There exists little doubt that considering the ever increasing world need for oil, massive and irreparable damage will be done to the marine environment unless drastic worldwide corrective action is taken now. Then one must ask, why all the furor over Canada's attempt to protect the Arctic which is surely in her national and equally in the world's international best interests? The complaint voiced does not concern Canada's objectives, but her unilateral method of achieving those worthy objectives. If the international community including the U.S. would look at this impasse in that dual light, a plausible course of action suggests itself. Agree (even with several reservations) that state action does (or has historically) create a precedent or basis for future international law.

The Arctic is a fine example of an area where much valuable experience could be gained by attempting to implement a new and more stringent anti-pollution law. The Antarctic was after all the subject of an innovative international agreement which allows many nations to work in harmony largely because

no single national sovereignty is exercised there. Take a similar tack in the Arctic except on a regional basis involving all countries which are contiguous with or lie north of the Arctic circle. There are two possibilities implicit here. The Canadian Arctic Waters Pollution Prevention Act or an agreed modification thereof could be adopted by an Arctic Regional body for implementation on a trial basis. The two biggest Arctic states, Russia and Canada, are in quite remarkable agreement already on measures needed to protect the Arctic Ocean. This step would remove the somewhat artificial stigma of being a unilateral solution and allow a more objective trial of specific regulations.

The next step would be to have each Arctic state implement the Canadian plan (or mutually acceptable variation) in their respective Arctic waters area as an agent of the United Nations. We've certainly had many a U.N. Peace Keeping Force in the past, why not a U.N. sponsored Environmental Protection Group for the Arctic? Any new body of law is bound to need to be modified based on operational experience. The model when well adapted to the strict environmental demands of the Arctic could prove a good point of departure for a worldwide and truly international marine environmental protective regime. Certainly such a comprehensive marine regime is needed and will ultimately evolve. Why not capitalize on an opportunity to learn in an area not presently trammeled by generations of commercial

usage, custom, and political bias? The U.S. original note of protest mentioned an intention to invite interested states to join in an international conference designed to establish rules for proper management of the Arctic beyond national jurisdiction. It is strongly suggested that the 1972 Stockholm Conference on the Human Environment would be a good opportunity to tender this belated invitation.

The regional and ultimately international nature of marine environmental protection stems from two quite practical considerations. First, marine pollution is not noticeably subject to national boundaries. Second, it is one thing to write comprehensive regulatory legislation for a wide ocean area--it's quite another matter to enforce this legislation in an effective manner. The resources alone needed to patrol the approaches to Arctic shipping lanes and prevent or regulate entry or otherwise implement the Canadian law may become too much of a national burden. It's no problem at the moment because large scale bulk oil shipping has yet to begin. All indications are that volume shipping through Arctic waters is not too far off. In this connection it is worthy of note that the Canadian government has recognized the importance of enhancing their polar icebreaking capabilities and have evidenced considerable interest in learning from recent Arctic patrol experiences of other northern countries. In April of last year the Canadian government (House of Commons Standing Committee on Indian Affairs

and Northern Development) appropriated funds to gain expert advice on polar icebreakers from Wartsila Shipyard, Helsinki, Finland. A quite detailed study was made of the legal relationship between Canadian icebreaker capacity and Canadian assertion of jurisdiction in Arctic waters. The entire committee discussion brought out quite clearly that no matter how control was exercised, i.e., by whatever vehicle, effective control was central to the credibility of the Canadian Arctic Pollution Prevention legislation.[3] In the minutes of this House of Commons committee meeting were related the generally sympathetic responses of several Arctic and Northern European countries to the Canadian initiative on the Arctic environment. To varying degrees their only reservations involved the unilateral nature of Canadian action.

The patrol of the entire Arctic Ocean approaches in the event of large scale oil shipment would be an immense undertaking. In the view of many it would pose too much of a financial burden for Canada alone. All the more argument for a regional approach. The present International Ice Patrol would offer an excellent administrative and organizational model from which there would be available a wealth of operational experience. Beside the obvious cost of operating an oversized Arctic Coast Guard, the matter of funding oil spill prevention and/or clean up costs is a big consideration. The Canadian goal of full and absolute liability for all pollution damage

involves a tremendous financial capability. Are such large amounts available for anti-pollution funding? Certainly the funds are available if one takes a hard look at the economics of the bulk oil shipping industry. The new economics of the giant tanker provides enormous profits. For instance, in 1970 the voyage charter of a Norwegian 100,000 deadweight ton tanker from the Persian Gulf to Great Britain brought a freight rate of $19.00 per ton with owner's total operating costs of only $2.40 per ton. In the same year a smaller tanker of 40,000 tons was purchased for $2 million. She was paid for in twelve months, plus a net profit of $3 million.[4] Operating costs decrease markedly as tanker size increases. A 250,000 DWT tanker cost about $20 million in 1970. One such tanker on a three year charter at $3.70 per ton per month realized gross earnings of over $34 million.[5] So the money's there; it's a matter of equitable distribution again. We have for years looked upon the marine environment as a free good of inexhaustible quality and at no cost to the user. It is becoming rapidly apparent that such an externality must be resolved in favor of mankind. A viable environment is an absolute necessity for human survival; therefore, it cannot be used nor abused without cost. The user must pay a reasonable price for its profitable use of the oceans. This being the case, it seems futile to fault Canada too heavily for attempting to gain a needed head start on a serious problem of recognized authenticity and global consequence. It is no longer an argument of whether the ends

justify the means, but a question of adopting valid coastal state objectives and methods by a regional and/or an international authority.

CHAPTER V

WHAT REMAINS -- A PREDICTION

A great deal of change in marine oil pollution law has occurred since the 1920's and the passage of the British Oil in Navigable Waters Act of 1922 and the U.S. Oil Pollution Act of 1924. Indeed these laws were the first modern day attempts by a sovereign state to acquire legal competence in this field. We have seen also that the nature of this legal competence has undergone a significant change. Initially the coastal state had a limited legal ability to take remedial action concerning marine oil pollution, but strictly within its territorial waters. As time progressed this legal authority has been increased to allow preventative action by a coastal state as distinguished from purely after-the-fact remedial efforts. This increased coastal state competence to prevent as well as correct marine oil pollution has in certain specific circumstances been extended to include a national competence outside of territorial waters. The three foundations of this increased legal competence are the 1969 Amendment to the London Oil Pollution Convention of 1954 and the two 1969 Brussels Conventions, the Intervention Convention, and the Liability Convention previously

discussed.* The strict and methodical application of the provisions of these three international conventions will provide the coastal state with a very considerably enhanced capability to deal with marine oil pollution. All three however have not as yet been brought into universal force for lack of sufficient national ratifications. The delay in U.S. ratification was evidently the result of attempting to resolve certain differences between the Brussels Conventions and existing national legislation. On 20 May 1970, President Nixon transmitted the two Brussels Conventions and the 1969 Amendment to the London Oil Pollution Convention to the Senate for their advice and consent.[1] Prior to that date however, President Nixon signed the Water Quality Improvement Act of 1970 which sharply increased penalties for oil spills.[2] It is instructive to note that two of the major strengths of the Brussels Conventions have been incorporated in this piece of national legislation. The new law specifies that strict liability will prevail, that is proof of negligence is not a factor. It also raised the clean-up bill from a maximum of $5 million or $67.00 per gross ton to a maximum of $14 million or $100.00 per gross

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*The formal title of these Brussels Conventions are: "International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties," sometimes referred to as the Public Convention, and "International Convention on Civil Liability for Oil Pollution Damage," sometimes referred to as the Private Convention.

ton whichever is less. This latter amount is taken directly from the provisions of the Brussels Liability Convention. With the ratification of the three conventions and adjustment of national legislation to suit coastal states will acquire a greatly increased competence to handle marine oil pollution effectively. But are these three Conventions and resulting national legislation sufficient to the need? Obviously Canada feels that a greater coastal state competence is required at least in the Arctic. There exists a wealth of credible scientific research that lends considerable weight to the Canadian contention that an oil spill in the Arctic is vastly more serious than one in a moderate climate. The greatest hazard stems from the slow rate of biological decomposition of crude oil at extremely low temperatures. Dr. R.E. Warner, Professor of Biology at the Memorial University of Newfoundland, reported the following in a paper prepared for the Canadian Wildlife Service:

> The decomposition rate of crude oil slows markedly at lower temperatures, and at 0° centigrade is drastically reduced, some components of the process stopping altogether. Decomposition in the Arctic Ocean whose temperatures are at 0° centigrade or below would be very slow indeed. Where crude oil is exposed to still lower temperatures, biochemical decay would be virtually nonexistent and the oil would persist for decades, perhaps centuries.[3]

There is an obvious internal conflict of interests in this Canadian situation. It is certainly in the Canadian best interests to develop the tremendous economic potential implicit in

the vast mineral reserves of the Arctic. On the other hand she must, in the long run, see to the proper protection of this very fragile hinterland. What will be the ultimate resolution of this dilemma and how will it affect the worldwide legal problem of marine pollution?

In my research and in correspondence and conversation with Canadian, British and U.S. officials, I am convinced that the Canadian position is honestly stated. Canada does not want to persist in a unilateral defensive posture any longer than is, in her view, absolutely necessary. However she will not abdicate her responsibility to protect the Arctic, which in the words of Prime Minister Trudeau, "is the most significant surface area of the globe for it controls the temperature of much of the Northern Hemisphere . . . Its continued existence in unspoiled form is vital to all mankind."[4] There are strong pressures being exerted by several world powers to develop the Arctic, particularly its large oil reserves. It is my contention that the resultant of these two forces, to develop and to protect, will if properly handled provide that "accommodation of interest" so frequently mentioned in Canadian writings on this subject.* This accommodation to which Canadian

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*Mr. J.A. Beesley, Legal Advisor to the Canadian Department of External Affairs, commented "we are not so much interested in gaining international acquiescence to our (Arctic Waters Pollution Prevention Act) policy as we are in seeking an accommodation of interest between coastal states and shipping states or other countries which might be using Arctic waters."

authorities refer could, and I believe will, take one of these forms:

1. greater recognition of the Arctic as being somewhat different from a freely navigable, essentially oceanic high seas to which all the freedoms of the high seas may not be strictly applicable.[5]

2. a greater tendency amongst Arctic coastal states to express a coherent Arctic protection policy which will be much in line with the present Canadian viewpoint. This is already apparent in recent Canadian-Russian discussions.[6]

3. and finally the need for Arctic oil, its abundance and its nearness to prime markets (particularly U.S. and Japan) will result in the development of surface or submarine tankers which will satisfy the safety requirements of existing Canadian law.[7, 8]

In support of the above contentions it should be noted that the Canadians are making detailed and carefully orchestrated preparations for the forthcoming United Nations Conference on the Human Environment which is to begin in Stockholm on 5 June 1972. The Secretary General of this U.N. sponsored Environmental Conference is Mr. Maurice Strong, an influential Canadian business executive and until recently, President of the Canadian International Development Agency. It is only reasonable to assume that given this controlling position, the Canadian preparations to promote their viewpoint will be characterized by thoroughness, imagination and persuasion. By

comparison I have been unable to discover any similarly cohesive preparation to articulate the U.S. view on the control of marine pollution. This impression is exemplified by the Chairman of the British Royal Advisory Committee on Oil Pollution of the Sea, Lord Wayland Kennet, who made the following comment concerning U.S. preparations: "The United States rumbles forward, divided between pros and antis to the very top, issuing contradictory statements from every vent, but on the whole more committed to the success of the Stockholm Conference than not."[9]

At any rate, I am concerned that the Canadian viewpoint appears to be better staffed for worldwide presentation than does our own. If we wish to influence events at Stockholm we would appear to have considerable homework yet to be accomplished.

Having examined the legal competence of the coastal state to deal with marine oil pollution at some length, what will be the ultimate result of coastal state influence on the development of international law? I would conclude by making the following predictions for international marine pollution law development in the 1970's:

a. The Stockholm Conference on the Human Environment will have a greater than anticipated positive affect on the strengthening of existing conventions on marine pollution.

b. Necessary ratifications will be forthcoming within a year to place the two 1969 Brussels Conventions and the 1969 London Amendment into force.

c. The 1969 Brussels Resolution concerning the establishment of an International Compensation Fund for Oil Pollution Damage will be implemented. Constructive and successful efforts will be made by IMCO to include later provision for coverage concerning marine pollutants other than oil.

d. International action will result in the total prohibition of the discharge of oil into any part of the high seas except as the result of an "act of God" or under "Force Majeure" circumstances.

e. There will occur international acceptance of a Regional Arctic Marine Pollution regime that is virtually identical to the present Canadian concept.

f. There will be established under United Nations auspices an International Environmental Protection Agency competent to deal with all forms of marine pollution.

State practice does to a considerable degree affect the future formulation of international law. The well documented and persuasively articulated coastal state's concern with the protection of her own marine environment will certainly have a positive influence on the development of international environmental law.

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