HIGH STAKES IN THE HIGH ARCTIC: JURISDICTION AND COMPENSATION FOR OIL POLLUTION FROM OFFSHORE OPERATIONS IN THE BEAUFORT SEA

DAVID J. BEDERMAN*

I. INTRODUCTION

The Beaufort Sea has an unusually sensitive ecological system. Offshore oil and gas resource development threatens the stability of that system by increasing the risk of pollutants entering the Beaufort. The risks to the environment posed by oil exploration in the Beaufort region should have provided the impetus for the creation of a comprehensive oil spill liability and compensation regime between the governments of Canada, the United States, and the state of Alaska. Despite these risks, no such regime exists. Progress in creating an effective regime, one that accounts for the potential magnitude of environmental damage in the Beaufort Sea, has proceeded haphazardly at best. Competing jurisdictional interests and environmental policies have prevented the attainment of a mutual resolution that provides adequate protection for the Beaufort Sea and those dependent upon it.

This article compares the contours of relief currently available under Alaska, federal, and Canadian law in the event of an oil spill. It examines the points at which these laws intersect, illustrates why the existing window of relief is insufficient, and proposes a few practical measures to address the inadequacies. Part II of this article assesses the environmental risks attendant to offshore operations in the Beaufort Sea. Part III examines various provisions of the Alaska, federal, and Canadian oil spill liability schemes. The section also reviews the issues that dominate federal-state relations in this area, namely preemption and jurisdiction, and addresses the international dimensions of oil pollution in the Beaufort. Finally, Part IV discusses the inadequacies of existing laws, principally those concerning compensation and restoration of the environment, and suggests methods of dealing with those inadequacies.

Copyright © 1987 by Alaska Law Review
II. HISTORY AND RISKS OF OFFSHORE ACTIVITIES IN THE BEAUFORT SEA

The Beaufort Sea, the waters of the Canadian Northern Archipelago, and the Chukchi Sea compose the High Arctic — one of the most inhospitable environments on earth. With a seabed that averages a depth of fifty meters, the Beaufort qualifies as one of the shallowest seas in the world. The continental shelf of the Beaufort extends nearly sixty nautical miles seaward from the North Slope of Alaska and the neighboring Mackenzie River Valley in Canada, and is essentially the same oil province as the productive Prudhoe Bay.

Daunting environmental conditions have not deterred exploration for oil in the Beaufort. Exploration in the Mackenzie Delta dates back to the early 1960's. Vigorous offshore operations began in 1973 when favorable geological conditions for petroliferous formations were first observed in the Beaufort's continental shelf.

Three major fields exist in the Beaufort. Drilling operations are undertaken in two distinct areas, each of which present engineering and technical difficulties. The JAGO Basin and the ARCO Anomolie constitute the "landfast" zone where the Beaufort Sea thaws during the brief summer. This area is close to shore, but not shallow enough to allow for pier-rigs. As a result, drillers construct artificial islands on mounted rigs. Over twenty artificial islands have been built. The

2. Various estimates of recoverable oil and gas offshore have been made. In 1974, the Alaska Department of Energy estimated reserves of 2.7 billion barrels of oil and 13.5 trillion cubic feet of gas. Alaska Tops in Oil Reserve, OFFSHORE, Feb. 1982, at 64, 69. This estimate did not include the relevant production figures from Prudhoe Bay on Alaska's North Slope. The Prudhoe Bay field is the twelfth largest field ever discovered in the world and the largest in North America. It qualifies as a "super giant" field, containing at least a trillion barrels of recoverable oil. Id. One group estimated that the amount of oil contained in the Beaufort find would equal that of oil and gas known to exist in North America. Id. at 69.
4. Frederick, La delimitation du plateau continental entre le Canada et les Etats-Unis dans la mer de Beaufort, 17 CAN. Y.B. INT'L L. 30, 34 (1979). The JAGO Basin and the ARCO Anomolie are just off the islands sheltering the Mackenzie River delta in Canada. The major field, the MARSH Anticlinal, straddles the 141 degree meridian and lies approximately 50 miles farther out to sea.
5. These "environmental structures" are expensive gravel islands, which cost one million dollars a vertical foot, and thus are uneconomic in waters exceeding 30 meters in depth. D. PIMLOTT, D. BROWN & K. SAM, supra note 1, at 30-34. Therefore, it is expensive to produce oil from the Beaufort Sea. Judicial notice of the extraordinary expenses associated with exploration and production in the Beaufort was taken in Village of Kaktovik v. Corps of Eng'rs, 9 Envtl. L. Rep. (Envtl. L. Inst.) 20,117, 20,122, 12 Envtl. Rep. Cas. (BNA) 1740, 1750 (D. Alaska 1978) (noting that
second drilling area, the "shear" zone, contains the MARSH field. The shear zone is a ten-kilometer-wide swath of ocean area in which the slowly rotating permanent pack-ice from the north grinds against the landfast seasonal ice in winter. Because these waters are open during the summer, drillers may anchor ice-reinforced ships. In very deep water, the drillers use floating, pre-cast concrete caissons able to withstand the ice-scour. The drilling season for these operations lasts less than 122 days.

Despite the inherent financial risks of oil exploration in the Beaufort, many expect drilling efforts to intensify. This prediction likely will arouse fears of environmental damage. Several factors combine to make a pollution incident of catastrophic proportions a real possibility. First, the Beaufort Sea is a zone of abnormally high geostatic pressure. Gas hydrates, when "thawed" due to contact with warm drilling muds, release gas of exponentially increasing pressures that endangers safe oil operations. Escaping gas has resulted in a number of oil well blowouts in the Arctic and is likely to cause many more. Blowout risks have been assessed variously as two in every 1,000 wells drilled (as predicted by environmentalists) to one in every 20,000 wells drilled (an oil company estimate).

costs of exploratory wells averaged $8-20 million, while production costs ranged from $400 million to $1 billion).

7. See T. BERGER, supra note 3, at 67-68.
9. See generally Edmiston, supra note 6. Dome Petroleum Co. plans to continue construction of its arctic petroleum and loading atolls, which are massive artificial islands that support production facilities and harbor special ice-breaking tankers. Id. at 17. On Alaska's Beaufort shelf, construction of artificial islands has been the subject of some controversy. The Corps of Engineers opposed ARCO's request for a permit to build a gravel causeway to the offshore Lisburne field. Id. at 19; see also Village of Kaktovik v. Corps of Eng'rs, 9 Env'l. L. Rep. (Env'l. L. Inst.) at 20,123, 12 Env'tl. Rep. Cas. (BNA) at 1752-53 (refusing to enjoin Exxon's construction of a gravel drilling pad). Proposals for a deepwater port off the Mackenzie Delta are now being considered. Edmiston, supra note 6, at 18. The United States planned to offer leases out to the 200-meter isobath in the Beaufort, and bidding on these areas indicates the confidence of the industry that recovery operations can proceed. Id. In 1986, the federal government initiated plans to auction one tract, Sale 97 in the Diapir Field, in water depths beyond that traditionally drilled in the Beaufort. No new lease sales in the Beaufort by the State of Alaska are scheduled until 1987. Id.
11. Two Panarctic gas wells ignited in 1969. Crews worked three months to extinguish one of them and nine months to bring the other under control. A. MILNE, OIL ICE AND CLIMATE CHANGE 40 (1979). Dome Petroleum Co. reported two incidents in the Beaufort in 1976. One blowout contaminated fresh water, while the other was contained below the surface. T. BERGER, supra note 3, at 69.
The second factor that increases the risk of a catastrophic pollution incident in the Beaufort is the extreme sensitivity of the Beaufort's ecological system. Because the Beaufort is a shallow sea, its weather conditions, its fauna, and its ecosystem are delicately balanced. The hydrography of the area features a slow-moving current that intensifies along the north coast of Alaska. An oil slick would be caught up in this current and would affect the ecological balance of both the shelf and land areas. Because the Arctic ecosystem is young and unstable, an oil spill would adversely affect the whole pattern of reproduction. Oil also has lethal, sublethal, and synergistic effects on Arctic wildlife. Although the Beaufort Sea has no potential as a commercial fishery, it remains a habitat for Bowhead and Gray whales, both endangered species. Should a spill occur, these whales might die by eating contaminated food, by suffocating, or by contracting pneumonia. One potential result of an offshore accident is truly apocalyptic: an oil spill could reduce the albedo, or reflectivity, of the ice, inhibit new ice formation, and promote greater heat absorption. The result would be a melting of the pack-ice and potentially widespread climatic changes.

Spills in the Beaufort Sea would also be extraordinarily difficult to clean up. Frigid temperatures would render ineffective chemical dispersants and absorbant materials like straw, synthetics, and peatmoss. Sinking the oil would adversely affect organisms on the seabed, while burning the oil would prove nearly impossible and potentially counterproductive in the extreme cold. Clean-up operations might have to be undertaken in the complete darkness of the Arctic winter and would be hindered by ice. Oil would tend to spread under the ice and collect in pockets. When emulsified, the oil would become entrained

14. A. Milne, supra note 11, at 15-16.
15. O. Young, Resource Management at the International Level: The Case of the North Pacific 60 (1977); Dunbar, On the Fishery Potential of the Sea Waters of the Canadian North, 12 Arctic 150, 153 (1970).
17. A. Milne, supra note 11, at 85-103.
18. Id. at 82-83.
19. Id. at 55-56. Most of the Beaufort is ice-free for one to two months of the year. During the summer, however, ice floes can entirely cover an area that was clear a week before. Department of Natural Resources of Canada, Drilling in Arctic Waters 390 (1971). Ice thickness reaches its maximum in May with seven feet of new ice covering ten to fifteen feet of old ice. Floes can move at speeds of two knots per hour. Ice damage presents a significant danger to oil installations. See generally A. Milne, supra note 11, at 50-55. In response, some drillers have restricted drilling to the summer months. On the United States shelf, drilling is permitted only...
with the ice, prove impossible to burn or absorb, and likely leave a thick residue best removed by a shovel.\textsuperscript{20} Drifting ice would then leave a trail of oil and prevent a localized cleanup.

A number of factors combine to make it possible for oil spilled in the Beaufort to persist for centuries and thereby prolong the exposure of sensitive marine organisms to the dangerous conditions.\textsuperscript{21} First, decomposition is vastly slowed in the Arctic. This means that virtually no biochemical decay of oil will occur. Second, the Beaufort Sea remains stagnant in the winter. Third, the low evaporation rates in the Beaufort Sea region are insufficient to affect the highly toxic lighter fractions of crude oil.\textsuperscript{22}

This exposition shows that the conditions for offshore operations in the Beaufort are unique and pose what might be insurmountable environmental dangers. As one court concluded: “Its precarious environment means that the resources of the Beaufort Sea will doubtless prove difficult to assay, develop, and protect. Life [there] is nasty, brutish, and sometimes short.”\textsuperscript{23} It is thus possible that a pollution incident will occur that will have both domestic and international effects.

III. Survey of Current Legal Schemes

The governments of the United States, Canada, and the state of Alaska have created separate statutory schemes to deal with the problems that will arise in the event of an oil spill in the Beaufort Sea. Because the United States-Canadian boundary in the Beaufort remains in dispute, all three statutory schemes could be invoked. To determine the applicable law, one must analyze each issue addressed by both federal and state law in light of the federal preemption doctrine. In the disputed areas, the principles of international law also must be analyzed. This section first examines and compares the scope and application of the domestic schemes. An analysis of the possible

---

\textsuperscript{20} A. MILNE, supra note 11, at 82-83.
\textsuperscript{21} See EIS, supra note 16, at 178-79.
\textsuperscript{22} Id.
\textsuperscript{23} North Slope Borough v. Andrus, 642 F.2d 589, 593 (D.C. Cir. 1980).
implications of the continuing boundary controversy between the United States and Canada follows.

A. Domestic Schemes

Within the United States sector of the Beaufort Sea, liability and compensation for oil spills depend on two sets of interlocking and, in some contexts, competing regulations. Both the Alaska and federal plans address the issues of cleanup, compensation, penalties, and financial responsibility. "Cleanup" refers to those measures taken to remove an oil spill and restore the environment to its previous condition. Compensation and liability rules are intended to assign responsibility for an oil spill. These rules also enable private parties to maintain an action, often through public financing, for additional economic losses incurred. "Penalties" are civil and criminal sanctions designed to punish corporate irresponsibility after a pollution incident. By contrast, "financial responsibility" refers to insurance plans that require offshore operators at the outset to post adequate guarantees of their ability to meet potential liability. The subsections below outline these four issues. A discussion of the jurisdictional conflicts regarding federal preemption and state territorial waters follows.


a. Federal Offshore Oil Spill Pollution Fund. The Offshore Oil Spill Pollution Fund ("OSPF")\(^{24}\) establishes a compensation fund ("Fund") for reimbursement of costs associated with cleaning up oil spills. The OSPF holds the owner or operator of an offshore facility strictly liable to state and federal governments for the costs of removing spilled oil.\(^{25}\) Removal costs include the expenses of reasonable measures taken after an oil spill to prevent, minimize, or mitigate the resultant pollution.\(^{26}\) Technically, any party may assert this type of claim. If a private claimant seeks reimbursement of reasonable costs of removal, however, an owner or operator may escape liability by proving the sole cause of the incident was war, natural disaster, or the

---


25. The Oil Spill Pollution Fund ("OSPF") imposes strict liability for removal costs incurred by state and federal governments on the owner and operator of any vessel or facility that is the source of pollution. Id. § 1814(d).

26. Id. § 1811(14). Apparently, this definition does not encompass costs incurred in a "pure threat" situation where ameliorative measures are taken in time to prevent an actual spill of oil. Clean-up costs must be both reasonable—approximately equal to the market value of similar goods and services—and actual—really incurred. H.R. REP. No. 590, 95th Cong., 2d Sess. 179, reprinted in 1978 U.S. CODE CONG. & ADMN. NEWS 1450, 1584.
intentional or negligent acts of a third party. In addition, the owner or operator's liability to a private claimant for removal costs may be limited in the absence of willful misconduct or gross negligence. Owners and operators may also claim reimbursement for removal costs if they are entitled to one of the defenses against a private claimant. If the owner or operator is not eligible for exoneration, only those funds in excess of the applicable liability ceiling may be requested.

In most cases, governmental entities, not private parties, initiate clean-up operations. The defenses and limitations on liability generally available to owners and operators in an action for economic loss or cleanup by a private party are not available when the entity seeking reimbursement is the federal government or any state or local official agency. Under the federal scheme, the owner or operator of the source of the oil pollution is absolutely liable to such governmental agency in full for all costs of removal. In the event the owner or operator is financially unable to meet this obligation fully, the entity incurring clean-up expenses may present a claim under the OSPF up to the Fund's $200,000,000 limit. A claim for injury or destruction of natural resources (as distinct from loss of use) may be asserted only by the Secretaries of Commerce or Interior for federally managed resources or the appropriate state agency for state controlled resources. The sums recovered are available to restore, rehabilitate, or acquire resources equivalent to the damaged natural resources and are not limited to the actual replacement cost of the resources lost. It

27. 43 U.S.C. § 1814(c) (1982).
28. Id. § 1814(b). The limitation of liability for total removal and clean-up costs is $35,000,000 in the case of an offshore facility and $250,000 or $300 per gross ton, whichever is greater, in the case of a vessel. These limitations, however, do not apply if the incident was caused by the willful misconduct or gross negligence of one in privity with the owner or operator. Id.
29. Id. § 1813(b)(1)(A).
30. Id. § 1813(b)(1)(B).
31. See infra note 55 and accompanying text.
33. Id. § 1817(d). The OSPF is also available to private claimants not compensated fully because of the limitation of liability of owners and operators. Id.
34. The Fund is to be maintained at a level not greater than $200,000,000. Id. § 1812(a). The Fund is designed not to fall below the level of $100,000,000. Id. § 1812(d)(2). Payments in excess of $100,000 must be approved by the Secretary of Transportation. Id. § 1817(g)(2).
35. 43 U.S.C. § 1813(b)(3) (1982). The OSPF vested in the President the authority to assert these particular claims. Id. § 1813(b)(3). This power was delegated to the named cabinet officials. See Exec. Order No. 12,123, 44 Fed. Reg. 11,199 (1982), reprinted in 43 U.S.C. § 1811 (1982).
seems, however, that limitations on liability and defenses may apply to a governmental damage action for destruction of natural resources. Here too, the Fund is available for any amount not compensated by the owner or operator.

b. Alaska legislation. The Alaska scheme imposes liability for cleanup on a somewhat broader category of persons than does the federal scheme, including anyone who causes or permits specified levels of oil to be discharged into the territorial jurisdiction of Alaska waters. Like the federal scheme, the Alaska provisions subject a polluter to unlimited liability to the state for the full amount of actual damages. Actual damages include direct and indirect costs "associated with the abatement, containment, or removal of the pollutant, restoration of the environment to its former state, and all incidental administrative costs." Alaska, however, limits eligibility for the recovery of clean-up expenses to the state. Under both the federal and Alaska schemes, only the state may recover damages for the restoration of natural resources, including fish and wildlife.

No defenses are available to the polluter against state claims for the recovery of clean-up or restoration costs, although the polluter can assert such defenses in response to the imposition of penalties. In addition, the Alaska scheme places no limitation on polluter liability for the actual expenses of cleanup and restoration but does put a cap on penalties. Alaska also provides for an "overage" fund similar to the federal scheme, but apparently limits its availability to the state

Rico v. SS Zoe Colocotroni, 628 F.2d 652, 676-78 (1st Cir. 1980) (noting that in Puerto Rico's planned restoration of a damaged mangrove swamp, a portion of the damages could be allocated to replacement of wild birds or game that would not be expected to regenerate within a relatively finite period), cert. denied, 450 U.S. 912 (1981).

37. See supra notes 27-28 and accompanying text. Only in the case of a governmental claim for removal costs do the limitation on liability and owner/operator defenses not apply. 43 U.S.C. § 1814(d) (1982). Damages for injury to or destruction of natural resources do not clearly fall into this category. See id. § 1813(a)(2)(C), (b)(3).

40. ALASKA STAT. § 46.03.760(e) (Supp. 1986).
41. Id.
42. Id.
43. 43 U.S.C. § 1813(b)(3) (1982); ALASKA STAT. § 46.03.780 (Supp. 1986).
44. In an action for recovery of clean-up expenses or restoration costs, the polluter is liable for the full amount. See ALASKA STAT. §§ 46.03.760(e), .780 (Supp. 1986). Defenses that are similar to those provided in the federal scheme are available only in actions brought under the penalty provisions. Id. § 46.03.758(h); see infra text accompanying note 78.
45. ALASKA STAT. § 46.03.760(e), .780 (Supp. 1986). But cf. ALASKA STAT. § 46.03.758(e) (Supp. 1986) (providing limitation of $100,000,000 on penalties), discussed infra text accompanying note 73.
2. Compensation and Liability.

a. Federal Offshore Oil Spill Pollution Fund. In addition to reimbursement for costs of removal, owners and operators are liable for the following six varieties of damages under the OSPF: (1) injury or destruction of real or personal property; (2) loss of use of property; (3) injury or destruction of natural resources; (4) loss of use of natural resources; (5) loss of profits; and (6) loss of tax revenues.47

Any "United States claimant" may assert a claim for loss relating to real or personal property, or for the loss of use of natural resources48 as distinct from a claim for destruction of natural resources.49 Damages for lost profits and impairment of earnings also are available to all United States claimants. Recovery for lost profits and impairment of earnings, however, is limited to those parties who derive at least twenty-five percent of their earnings from activities that utilize the damaged property or natural resource.50 All wages, earnings, and profits, not just net income or net profits, are included in the computation of the twenty-five percent minimum.51 Only the federal government or any state or political subdivision may raise a claim for loss of tax revenues.52

Claims may be asserted against either the offshore operator or the guarantor offering proof of financial responsibility for the facility.53 The guarantor is permitted to invoke all of the rights and defenses available to the owner or operator.54 If the incident resulted solely

46. A general state fund provides for oil and hazardous substance clean-up costs incurred by the state and its municipalities. See Alaska Stat. § 46.04.010 (Supp. 1986). The "oil and hazardous substance release mitigation account" ("mitigation account") is funded by money recovered from the polluter for containment, as well as fines, penalties, and damages recovered by the state for oil or hazardous substance spills. Id. § 46.04.020 (Supp. 1986). Municipalities are entitled to reimbursement from the account if the Commissioner of Environmental Conservation finds that such expenses are necessary to respond to an oil release that threatens the public health or welfare or the environment. Id. § 46.04.070(c).

48. Id. § 1813(b)(2).
49. See supra note 35 and accompanying text.
53. Id. § 1815(c). See infra notes 85-90 and accompanying text.
54. 43 U.S.C. § 1815(c) (1982).
from an act of war, God, or a negligent third party, the owner/operator escapes liability.\textsuperscript{55} Moreover, where the facts do not support a finding of gross negligence or willful misconduct, certain limitations on liability apply.\textsuperscript{56} In the case of an owner or operator of a vessel, the statute limits financial responsibility to $250,000 or $300 per ton, whichever is greater.\textsuperscript{57} A thirty-five million dollar limitation on liability applies if the polluter owned or operated an offshore facility.\textsuperscript{58} Even if the offshore operator or vessel owner acts negligently or willfully, the guarantor can avoid liability by proving that the willful misconduct of another caused the incident.\textsuperscript{59}

When an offshore operator denies liability for oil pollution damage or otherwise fails to satisfy a claim within sixty days of presentation, individual claimants must choose between proceeding with a civil action against the operator or presenting the claim to the Fund.\textsuperscript{60} This decision is irrevocable and exclusive.\textsuperscript{61} When the operator's settlement does not fully satisfy a claim because of limitations on liability or insolvency, a claimant may present the balance to the Fund.\textsuperscript{62} In these circumstances, the Fund acts as an overage insurer. If the Fund denies liability under the OSPF, a claimant may submit the dispute to the Secretary of Transportation for arbitration.\textsuperscript{63} The claimant may commence a court action against the Fund when arbitration fails to resolve the matter.\textsuperscript{64}

\textit{b. Alaska legislation.} The Alaska damage and liability provisions hold persons owning or having control over a "hazardous" substance that enters state waters strictly liable to injured third parties.\textsuperscript{65} "Hazardous" substance is statutorily defined as including oil.\textsuperscript{66} Damages under the Alaska scheme include three of the six varieties covered by federal law: (1) injury to real or personal property; (2) loss of income; and (3) loss of economic benefit.\textsuperscript{67} As in the federal scheme, a polluter is relieved of liability to third parties if he can prove that the spill resulted solely from acts of war, God, or a negligent or willful act of a

\begin{itemize}
  \item \textsuperscript{55} Id. § 1814(c).
  \item \textsuperscript{56} Id. § 1814(b).
  \item \textsuperscript{57} Id. § 1814(b)(1).
  \item \textsuperscript{58} Id. § 1814(b)(2).
  \item \textsuperscript{59} Id. § 1815(c).
  \item \textsuperscript{60} Id. § 1817(a), (b).
  \item \textsuperscript{61} Id. § 1817(c).
  \item \textsuperscript{62} Id. § 1817(d).
  \item \textsuperscript{63} Id. § 1817(f).
  \item \textsuperscript{64} Id.
  \item \textsuperscript{65} \textsc{Alaska Stat.} § 46.03.822 (1982).
  \item \textsuperscript{66} \textsc{Alaska Stat.} § 46.03.826(4)(B) (Supp. 1986).
  \item \textsuperscript{67} \textsc{Alaska Stat.} § 46.03.824 (1982).
\end{itemize}
third party (including the Alaska and United States governments).68 Contrary to the OSPF, the statute apparently lacks a limitation on owner or operator liability as well as a mechanism for private individuals to collect uncompensated damages.


a. Federal Offshore Oil Spill Pollution Fund. The Fund is primarily derived from fees imposed on the owners of oil drilled on the outer continental shelf. Fees are not to exceed three cents per barrel and are set so as to maintain the Fund at a level of $100,000,000 to $200,000,000.69 In addition to these nonpunitive fees, the statute provides for penalties of up to $10,000.70 These penalties, however, are imposed for failing to pay the statutory fee and not for any actual discharge of oil.71 Thus, the real penalty for oil discharge in the federal scheme lies in its exposure of owners and operators to liability for cleanup and compensation.72

b. Alaska legislation. In sharp contrast to the federal system, penalty provisions play a major role in the Alaska scheme. Alaska imposes penalties upon any person causing or permitting a pollution discharge. If the discharge rises above 18,000 gallons of oil, additional persons are penalized.73 The Alaska scheme provides two sets of penalty provisions in order to create a “meaningful incentive for the safe handling of oil.”74

Under the first set of penalty provisions, a polluter may be held liable on a per gallon charge that varies with the nature of the body of water polluted. Ten dollars per gallon is assessed for oil entering freshwater environments; $2.50 per gallon is charged for oil entering estuarine, intertidal, or confined saltwater environments; and one dollar per gallon is assessed for oil entering unconfined saltwater areas and environments without significant aquatic resources.75 If the polluter acted with gross negligence or discharged intentionally, the per gallon penalty may be increased five-fold.76 A one hundred million dollar limit applies to discharges in excess of 18,000 gallons. One hundred million dollars is, in effect, the highest penalty that the state can

68. ALASKA STAT. § 46.03.758(h) (Supp. 1986).
70. Id. § 1812(d)(3)(A).
71. Id.
72. See supra notes 25-38, 47-54 and accompanying text.
73. ALASKA STAT. § 46.03.758(e) (Supp. 1986).
74. Id. § 46.03.758(a)(2).
75. Id. § 46.03.758(b)(1).
76. Id. § 46.03.758(b)(2).
impose. A polluter who proves that the spill resulted solely from acts of war, God, or a negligent or willful act of a third party may escape liability for the penalty.

As an alternative to the above environmentally-graded penalty, a pollution discharger may be subject to civil penalties of “not less than $500 nor more than $100,000 for the initial violation, nor more than $5,000 for each day thereafter on which the violation continues.” The court can adjust these penalties to take into account reasonable compensation for any adverse environmental effects caused by the violation, the state’s costs in investigating the violation, and the economic savings realized by the violator in not complying with the statute. Non-willful violations are classified as Class B misdemeanors, while willful violations constitute Class A misdemeanors. Any amount of oil removed by a polluter is deductible from the total amount of penalties imposed.


a. Federal Offshore Oil Spill Pollution Fund. Under the OSPF, owners and operators of oil-carrying vessels and offshore facilities must furnish proof of financial responsibility to the extent of the applicable level of limitations on liability. Owners and operators may satisfy this responsibility through any combination of insurance, guarantee, surety bond, or self-insurance. Thus, a vessel owner or operator need only show proof of responsibility up to the greater of $250,000 or $300 per ton, and an offshore operator or owner must

77. Id. § 46.03.758(e).
78. Id. § 46.03.758(h).
79. Id. § 46.03.760(a).
80. Id. § 46.03.760(a)(1). These damages will be determined according to the “toxicity, degradability and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality.” Id.
81. Id. § 46.03.760(a)(2).
82. Id. § 46.03.760(a)(3). “Economic savings” is defined as “that sum which a person would be required to expend for the planning, acquisition, siting, construction, installation, and operation of facilities necessary to effect compliance with the standard violated.” Id. § 46.03.760(d).
83. ALASKA STAT. § 46.03.790 (Supp. 1986). A false representation made with respect to the requirements of this statute is punishable by a fine of not more than $25,000, or by imprisonment for not more than one year, or both. Id. § 46.03.790(e)(3).
84. ALASKA STAT. § 46.03.758(f) (Supp. 1986).
86. Id.
87. See id. § 1814(b)(1).
obtain $35,000,000 worth of coverage.88 Proof of these levels of financial responsibility is satisfactory regardless of the ultimate availability of liability limitations.89 As previously mentioned, no limitation on liability for clean-up and removal costs in an action by the state exists under the federal scheme.90

b. Alaska legislation. The Alaska financial responsibility requirements resemble the federal provisions in a number of respects. Issuance of a permit for offshore exploration or a production facility requires proof of financial responsibility up to a minimum of $35,000,000 per incident.91 Financial responsibility takes the form of demonstrated insurance, self-insurance, surety, or guarantee.92 Contrary to federal law, Alaska does not define its financial responsibility requirements in terms of any limitations on liability. Thus, polluter assets above the required level, if any, appear to be within the reach of claimants. The Alaska statutes also provide for direct action against insurers and guarantors providing financial responsibility to offshore operators.93 Unlike other state statutory schemes, the Alaska legislation preserves the insurers’ right to invoke any substantive defenses available to the insured.95

5. Federal/State Jurisdictional Conflicts. Conflicts as to the applicability of federal and Alaska compensation schemes for oil pollution arise on two discrete levels. The first involves the issue of federal preemption of state law remedies; the second concerns delineation of

---

88. See id. § 1814(b)(2).
89. See id. § 1815(a)(1).
90. See supra note 32 and accompanying text.
91. ALASKA STAT. § 46.04.040(b) (1982). In 1980, the Alaska legislature ordered the Department of Environmental Conservation to conduct a survey to determine whether the $35,000,000 amount was adequate. See Act of July 1, 1980, ch. 116, § 12, 1980 Alaska Sess. Laws (unpaginated). Apparently, the legislature considered this figure appropriate since no new legislation has been introduced to increase the figure.
92. ALASKA STAT. § 46.04.040(e) (1982). The evidence offered to show financial responsibility must satisfy the requirements of Alaska’s Department of Commerce and Economic Development. Id.; see also ALASKA ADMIN. CODE tit. 18, §§ 20.005-.105 (Oct. 1981).
93. An action under ALASKA STAT. §§ 46.03.758, .760(a), (e), .822 (1982 & Supp. 1986) may be brought in a state court directly against the insurer or another person who provided evidence of financial responsibility. ALASKA STAT. § 46.04.040(e) (1982). A number of other state statutes allow for direct action. See, e.g., CAL. INS. CODE § 11,580 (West Supp. 1987); LA. REV. STAT. ANN. § 22:655 (West 1978).
94. See supra notes 44, 68, and 78 and accompanying text.
Alaska's territorial jurisdiction. Since the Alaska and federal compensation schemes differ in many respects, determining which would prevail in a given situation is vitally important.

a. The application of the preemption doctrine. Admiralty law traditionally has precluded individual parties from claiming recoveries under both state and federal compensation schemes. Nevertheless, this rule has been relaxed so that federal admiralty law does not preempt all state action. The recent trend has been to give state pollution liability statutes effect unless Congress has manifested a clear intention to preempt the field or the state statute actually conflicts with the federal law.

Although as yet there has been no examination of state law preemption by the OSPF, preemption analysis under the Federal Water Pollution Control Act's ("FWPCA") similar provisions sheds light on the likely outcome. The oil and hazardous substance provisions of the FWPCA were designed to provide a quick method of restoration by imposing liability upon owners and operators of vessels for all initial clean-up costs, regardless of fault. The FWPCA expressly does not: (1) preempt any state from imposing "any requirement or liability with respect to the discharge of oil or hazardous substances into any waters within such state" or (2) affect "any State or local law not in conflict" with the Act relative to onshore or offshore facilities.

Potential FWPCA preemption of the Alaska oil compensation scheme was specifically considered by an earlier commentator. The commentator concluded that those portions of the Alaska statute that did not go beyond the explicit standards set by the FWPCA, along

100. Id. § 1321(f)-(i) (owners and operators have limited rights of subrogation against third parties solely responsible for costs incurred in cleanup and removal).
101. Id. § 1321(o)(2), (3) (emphasis added).
102. Pritchett, Alaska Strict Liability Oil Spill Legislation: What Effect?, 8 UCLA-ALASKA L. REV. 21 (1978). The article discusses Askew v. American Waterways Operators, Inc., 411 U.S. 325 (1973), where the Supreme Court ruled that a Florida statute providing for recovery of clean-up costs and imposing strict liability on waterfront oil-handling facilities was not preempted by the 1970 Water Quality Improvement Act. Following Askew, the Court in Ray v. Atlantic Richfield Co., 435 U.S. 151 (1978), held that state pollution liability statutes will be given effect "unless Congress has manifested a clear intention to preempt the field or the state statute actually conflicts with the federal law." Id. at 157-58. Applying this test, the court in In re Allied Towing Corp., 478 F. Supp. 398 (E.D. Va. 1979), held that the Federal Water Pollution Control Act ("FWPCA") did not preempt Virginia's liability scheme. The court believed that Congress intended the FWPCA to provide states with an alternative federal remedy for recovery.
with those provisions for public and private damages (provided they arose out of a discharge within Alaska waters), were unlikely to be preempted. The issue of liability to private parties for damages caused by discharge into non-state territorial waters, however, appeared problematic to this commentator since the state scheme generally extends liability to benefit private claimants for damage caused by hazardous substances which enter state waters while the FWPCA does not.

A recent United States Supreme Court decision confirms the tenuousness of a state's imposition of liabilities in conflict with the FWPCA for damage caused by discharge outside of state waters. In International Paper Co. v. Ouellette, Vermont residents filed a class action in common law nuisance against a New York paper mill which had been discharging pollutants near the Vermont-New York border. The paper company moved for summary judgment on the ground that the FWPCA preempted the state law upon which the residents based the suit. The lower court dismissed the motion, holding that the FWPCA's "saving clause" preserved state actions to redress pollution in the state where the injury occurred.

The Supreme Court, however, concluded that the saving clause must be read narrowly, ruling that state law actions based on discharge from point sources in another state are preempted by the Act. The Court reasoned that "if affected states were allowed to impose discharge standards on a single point-source, the inevitable result would be a serious interference with the 'full purposes and objectives of Congress.'" The Court indicated, however, that an action in the source state under its own laws would not be precluded. Further, the Court's holding seems limited to laws which attempt to impose standards that differ from those central to the purposes of the Act and thus frustrate the uniform application of the FWPCA's standards.

103. Pritchett, supra note 102, at 37-38.
104. Id. at 45.
106. Id. at 4139.
107. Id.
110. Id. at 814.
111. Id. at 812.
Notably, in *Ouellette* the plaintiffs essentially attempted to use Vermont law to regulate a New York firm.

Under this analysis, since the FWPCA itself does not afford a private right to compensation, a state scheme which does would not necessarily be incompatible with the FWPCA's purpose. Unlike an action in nuisance based on a subjective perception of acceptable emission, Alaska's private action is based on actual economic injury. Compensation of actual injury would not seem to interfere with emissions standards set by the FWPCA. As to preemption of the Alaska scheme by the FWPCA, it appears that the more determinative issue would be whether the point of discharge is within state territorial jurisdiction.\(^1\)

While the *Ouellette* decision dealt solely with state regulation of pollutants discharged into the waters of another state, the reasoning seems equally applicable to state regulation of pollutants discharged into neutral waters. Thus, where the discharge does not occur within Alaska territorial waters, state law could be preempted by the FWPCA.

Since the FWPCA, however, Congress has enacted a more comprehensive oil spill compensation scheme. In 1978, the OSPF\(^1\) was created for the purpose of providing prompt payment of both public and private damages, as well as costs for removal of oil spilled as a result of activities on the continental shelf.\(^1\)\(^4\) With two clear exceptions,\(^1\)\(^5\) the OSPF uses more liberal language as to the state's ability to regulate compensation than that found in the FWPCA. Most notably, the OSPF's preemption provisions open the realm of supplementary state regulation to redress *damage* within the state's jurisdiction *regardless of the point of discharge.*\(^1\)\(^6\)

The OSPF provides that it will not "preempt the field of liability or . . . preclude any state from imposing additional requirements or liability for any discharge of oil resulting in damage or removal costs within the jurisdiction of that State."\(^1\)\(^7\) The OSPF, however, does explicitly exclude the application of state law in two areas. First, it precludes a double recovery for the same damage or clean-up

---

112. For a discussion of state territorial jurisdiction, see *infra* text accompanying notes 134-40.
115. *See infra* notes 118-119 and accompanying text.
116. 43 U.S.C. § 1820(c) (1982). *See also* H.R. REP. NO. 590, 95th Cong., 2d Sess. 193, reprinted in 1978 U.S. CODE CONG. & ADMIN. NEWS 1453, 1599 ("With the exception of requirements as to financial responsibility, this title does not preempt the field of liability and does not prevent any state from imposing oil spill liability laws or additional requirements.").
claims. This is simple equity: there should be no "double-dipping" for a state or its citizens. The second preemption allows offshore operators to demonstrate their financial responsibility under the federal statute and ignore any higher state financial responsibility requirements. Other than these restrictions, states are virtually unlimited in their right to create additional oil spill liability without preemption under the OSPF.

The OSPF, by its very terms, has no effect on Alaska's ability to provide for cleanup and restoration of the environment after a spill. Preemption of the Alaska clean-up and restoration provisions would not be at issue even under the FWPCA. Unlike the FWPCA, however, the OSPF gives private claimants a cause of action for damages due to oil pollution and allows states to provide for redress of damages regardless of where the oil originated. Unresolved questions as to both territorial preemption and potential private actions do not appear to be obstacles under the broad-targeted and less preemptive provisions of the OSPF. Thus Alaska's compensation provisions, both public and private, are unlikely to be preempted.

The problem is how Alaskans might collect damages awarded, and in this regard federal preemption is of greater immediacy. The federal statute unambiguously prevents states from imposing higher financial responsibility ceilings on operators, except for those operators actually working within state waters. Since Alaska has followed a conservative course in refusing to raise the financial responsibility requirements above the $35,000,000 federal maximum, its current provisions are not precluded by the OSPF's prohibitions. While the fixed financial responsibility limit seems to undercut Alaska's efforts to collect on an offshore operator's liability after a blowout, in actuality, it may have no such effect. Since offshore operators in the Beaufort are major oil companies, their assets, unlike those of "one-ship" tanker concerns, are ample and easily attachable. This means that Alaska should have no difficulty in executing a

---

118. Id. § 1820(a).
119. Id. § 1820(b).
120. Alaska, for example, required offshore operators to carry $35,000,000 of insurance even before the federal Fund became effective in 1978. See supra note 91.
122. See supra notes 39-43 and accompanying text. See generally Pritchett, supra note 100.
123. 43 U.S.C. § 1813(b) (1982).
124. Id. § 1820(c).
125. See supra notes 100-04 and accompanying text.
126. See 43 U.S.C. §§ 1815(b), 1820(b) (1982) (setting the federal maximum at $35,000,000).
127. ALASKA STAT. § 46.04.040(b) (1982); see also supra note 91.
128. See supra note 9.
judgment against an operator to cover his liability to the state, even if that liability is much greater than the $35,000,000 responsibility limit. Furthermore, the state has access to an "oil and hazardous substance release mitigation account" ("mitigation account") to which it may resort when assets of a polluter prove insufficient to restore damage.129

The state mitigation account, like the federal Fund, is designed to provide for cleanup and restoration when an individual polluter's assets are exhausted. The state account is funded by a system of civil and criminal penalties of up to $100,000,000130 while the Fund is generated primarily by a nominal fee imposed upon each barrel of oil produced.131 Although the federal statute has a $10,000 cap on penalties,132 there is no implication that states are barred from establishing their own system of fines. So long as the state continues to honor the $35,000,000 limit on proof of financial responsibility in collection of its penalties, any preemption challenge to Alaska's method of funding its mitigation account would likely fail. Absent direct indication by Congress,133 any expansion of the use of the state mitigation account to private claimants would also appear permissible under the language of the OSPF.

In sum, federal preemption currently should have little practical effect in limiting Alaska's efforts to enhance its oil pollution scheme.

129. See supra note 46.
130. ALASKA STAT. § 46.08.020(3) (Supp. 1986); see also ALASKA STAT. § 46.03.758(b) (1982).
132. Id. § 1822(a)(1).
133. Recently proposed legislation would reduce this wide latitude toward state oil spill statutes. In 1982 the House passed a Comprehensive Oil Spill Liability Act, but the Senate failed to act on it. See H.R. 5906, 97th Cong., 2d. Sess. (1982). An identical bill passed the House in 1985, and again the Senate failed to act on it. See H.R. 1232, 99th Cong., 1st Sess. (1985). This bill was later incorporated into H.R. 2005, 99th Cong., 1st Sess. (1985). As of this writing, the most recently proposed action on a comprehensive oil spill fund was S. 2340, 99th Cong., 2d Sess. (1986), upon which the Senate has again failed to act. The broad preemption provisions of these bills, which are likely to be reintroduced in the current session of Congress, might completely preempt Alaska's appropriation-based funding scheme. This would mean that funds would not be available for an enhanced clean-up operation, which would be necessitated if the initial, federally-funded recovery operation was inadequate. A restriction of funds would be particularly unfortunate in the case of ongoing clean-up operations in the Beaufort after a major spill there. Broad preemption provisions would pose an obstacle to state development of protective compensation programs. See Oil Pollution Liability: Hearing on H.R. 1232 Before the Subcomm. on Coast Guard and Navigation of the House Comm. on Merchant Marine and Fisheries, 99th Cong., 1st Sess. 170-72 (1985) [hereinaft 1985 Hearings] (testimony of Alaska Gov. Sheffield).
The OSPF has no effect on Alaska's clean-up and restoration provisions, nor does it obviously conflict with Alaska’s private compensation provisions. Since the existing state mitigation account available to the state does not appear to be preempted, it is unlikely that making this fund available to private claimants would raise preemption concerns, provided Alaska continues to require no more than the federal level of financial responsibility.

b. Federal/state territorial dispute. As previously indicated, state territorial jurisdiction at the point of damage may be the more critical issue in determining federal preemption under the FWPCA. Although this issue appears less relevant under the OSPF's more liberal focus on the site of damage, rather than of discharge, delineation of territorial jurisdiction remains pertinent since it is not certain whether the OSPF supersedes the FWCPA in this respect. At any rate, determination of territorial jurisdiction at the point of damage would be required under either scheme. Resolution of this issue is crucial because states retain the right to establish whatever compensation scheme they choose within their territorial waters without consideration of federal preemption. Since an oil spill from an installation close to shore likely would cause extensive damage to the coastline, a great incentive exists for states to extend their jurisdiction to reach near-shore facilities.

The issue of Alaska’s territorial jurisdiction is presently before a Special Master for the United States Supreme Court in United States v. Alaska. The dispute centers around the delimitation of the state’s seaward boundary. Arguing, among other issues, for recognition of

134. See supra text accompanying note 112.
135. See supra note 116 and accompanying text.
136. See 43 U.S.C. § 1814(f) (1982) (“To the extent that they are in conflict or otherwise inconsistent with any other provision of law relating to liability or the limitation thereof, the provisions of this section shall supersede such other provision of law . . . .”). Congress arguably intended that this subsection apply to conflicting provisions of the FWPCA. See H.R. REP. No. 590, 95th Cong., 2d Sess. 308, reprinted in 1978 U.S. CODE CONG. & ADMIN. NEWS 1450, 1589 (noting that the OSPF’s provisions are significant improvements over the FWPCA).
the Dinkum Sands formation as an island, thereby extending the state's jurisdiction,\textsuperscript{139} Alaska is unlikely to prevail on any ground now before the Court. The current baselines were drawn in accordance with the International Convention on the Territorial Sea and the Contiguous Zone, and Alaska's claims could compromise the United States' position in its jurisdictional dispute with Canada in the Beaufort Sea. In light of the international ramifications of the delimitation, the Supreme Court will probably continue its practice of deferring to the findings of the federal government in the drawing of baselines.\textsuperscript{140}

B. Liability and Compensation Coordination with Canada

Given the unique environment of the Beaufort Sea, cooperation between the United States and Canada in fashioning a workable liability and compensation regime for oil pollution in this region is imperative. The establishment of such a system will require the resolution of current jurisdictional questions, the creation of appropriate methods for joint response to pollution incidents, and perhaps most importantly, reciprocity between the compensation laws of both nations. In international disputes, as distinguished from those of a strictly federal character, issues of jurisdiction and sovereignty are paramount. Nevertheless, United States-Canadian cooperation in the Beaufort is unique in that simultaneous attempts have been made to resolve jurisdictional issues and to create a credible liability regime.

Development of a bilateral liability regime between Canada and the United States has been complicated by the continuing dispute over

\begin{itemize}
\item the effect of changes in geographical conditions on the characterization of certain areas as part of the coastline or as submerged lands for purposes of the SLA. See Statement of Questions Presented, \textit{supra} note 137, at 6-21.
\item The legal questions presented in \textit{United States v. Alaska} include: (1) the legal significance of the Dinkum Sands formation, see Statement of Questions Presented, \textit{supra} note 137, at 12-15; DeVorsey, \textit{Riddle of Dinkum}, 58 \textsc{Geographical Mag.} 192 (1986); DeVorsey, \textit{Dinkum Sands: Cartography and Controversy}, 16 \textsc{N. Engineer}, Mar. 1985, at 4; (2) the use of straight baselines in the delimitation, see Statement of Questions Presented, \textit{supra} note 137, at 6-8; (3) the status of submerged lands shoreward of the barrier islands as either part of Alaska's internal waters or part of United States territorial waters, see \textit{id.} at 11-12; (4) the effect of the 1976 extension of the ARCO Pier in Prudhoe Bay on the baseline used, see \textit{id.} at 15-16; and (5) the effect of offshore installations on Alaska's territorial jurisdiction, see \textit{id.}
\item \textit{See United States v. Maine}, 469 U.S. 504 (1985) (upholding the federal government decision on the role of offshore islands in drawing baselines); \textit{United States v. Alaska}, 422 U.S. 184 (1975) (upholding the federal government decision on the status of an Alaska inlet as historical bay). \textit{But see United States v. Louisiana}, 470 U.S. 93 (1985) (rejecting federal government's finding and holding that a sound constituted "historical bay" and was therefore within state territorial waters).
\end{itemize}
the international boundary in the Beaufort Sea. Canada claims that the location of the boundary should be determined on the basis of a tacit extension of the 141 degree west meridian line which was established in an 1825 Anglo-Russian treaty and the 1866 transfer of the Alaska territory between Russia and the United States. The United States rejects this claim and asserts that the equidistance principle of marine delimitation should be applied to the Beaufort. As with other frontier disputes, this one would be academic if not for the perceived value of the divisible area. At stake are some 6100 square nautical miles of ocean territory, including the geologically significant MARSH Anticlinal formation. Canada’s Dome Petroleum has proposed exploratory wells in this area.

The question of continental shelf delimitation became important as negotiations proceeded for an annex to the 1974 Canada-United States Marine Contingency Plan (“Joint-Contingency Plan”) applying specifically to the Beaufort Sea (“Beaufort Annex”). Modelled generally on the Bonn Agreement, the Joint-Contingency Plan, as

---

142. Convention Concerning the Limits of Respective Possessions on the North-West Coast of America and Navigation of the Pacific Ocean, Feb. 16, 1825, Great Britain-Russia, 75 Parry’s T.S. 95.
143. Cession of Alaska, Mar. 30, 1867, United States-Russia, 15 Stat. 539, T.S. No. 301 (entered into force June 20, 1867). Canada’s claim that the 141 West meridian line constitutes the boundary is demonstrated by its extension of the jurisdictional reach of the Arctic Waters Pollution Prevention Act to that line, see infra notes 156, 158 and accompanying text, and Canada’s use of the sector theory in the Arctic.
144. See Note, supra note 141, at 242-43. For a general explanation of the equidistance principle of marine delimitation, see id. at 234-35.
146. See Edmiston, supra note 6, at 17.
149. Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil, June 9, 1969, 704 U.N.T.S. 3 (entered into force Aug. 9, 1969). This document establishes zones of responsibility in the North Sea to facilitate the tracking and combating of oil spills. One critical flaw of the agreement is that the designated zones of responsibility do not conform with the parties’ shelf sectors. A number of British installations are, for example, located in other nations’ responsibility zones. Though the countries agree that the document covers blowouts, see generally R. BARSTON & P. BIRNIE, THE MARITIME DIMENSION 116 (1980), lack of enforcement powers and surveillance procedures might complicate cooperation.
revised in 1983, represents an improvement upon the European accord because of its inclusion of a funding provision requiring "the cost of response operations [to] be borne by the party having jurisdiction over the seabed activities involved." If, however, an oil spill were to occur in the area encompassing the unresolved boundary dispute, there could be a question as to which country was responsible. In case of such an ambiguity, the Joint-Contingency Plan's Beaufort Annex provides that the matter will be arbitrated when there is confusion about which nation will fund the clean-up operations. The Joint-Contingency Plan also contains detailed regulations for command, control, and information exchange in the event of a pollution incident; establishes response centers and teams; and permits authorities in both countries virtually to ignore the international boundary during the actual crisis. This last provision is crucial as neither party wanted to establish a precedent by setting a boundary in any agreement.

In the absence of a resolution to the jurisdictional conflict, Canada and the United States have attempted to harmonize their domestic legislation to provide a basis of relief for claimants in the other country. This effort has been only partially successful, notwithstanding the United States' complaints in the late 1970's of the inadequate recourse allowed under Canadian law.

Canadian compensation and liability provisions for offshore installations are detailed in the Oil and Gas Production and Conservation Act and the Arctic Waters Pollution Prevention Act (AWPPA). Both Acts impose absolute liability for oil pollution

150. See Joint-Contingency Plan, supra note 147, art. 202.3.
151. Beaufort Annex, supra note 148, art. N 100.2.2.
152. See Joint-Contingency Plan, supra note 147, art. 302.
153. Indeed, in the Beaufort Annex, supra note 148, no agreement was reached on the relevant data base for determining responsibility zones. The United States version of the Annex does have a map showing both the meridian line and equidistance lines. See Joint-Contingency Plan, supra note 147, at app. I. This map is reprinted supra p. 56. No such map appears in the Canadian printing of the Agreement.
damage on all offshore operators and require them to take all necessary measures to mitigate or clean up spills on the Canadian continental margin.\textsuperscript{157} The scope of the AWPPA, however, extends no further than the 141st meridian in the Beaufort, the boundary claimed by Canada,\textsuperscript{158} and neither Act addresses the issue of foreign claimants.

In 1980, the Canadian government entered into an agreement with its licensees (including all interest holders) involved in Beaufort drilling activities. This guaranty, known as the Canada Agreement,\textsuperscript{159} extends to United States claimants approximately the same remedies available to Canadians under the AWPPA.\textsuperscript{160} The liability added by this provision will cover damage caused west of the 141st meridian, which, solely for the purposes of this agreement, serves as the United States-Canada boundary.\textsuperscript{161} Under both the AWPPA and the Canada Agreement, the only valid defense is a showing that the claimant's conduct either caused or contributed to the damages.\textsuperscript{162} While the limit of liability under the AWPPA is $\text{C40,000,000,}$\textsuperscript{163} the Canada Agreement limits potential liability to $\text{C20,000,000.}$\textsuperscript{164} The Agreement will compensate for all clean-up costs and all property or environmental damage, but it is ambiguous on the issue of compensation for purely economic losses.\textsuperscript{165}

\begin{itemize}
\item[159.] The Canada Agreement was entered into June 1980, and its full text has never been published. For extracts, see I. Gault, \textit{supra} note 158, at 79 n.240; I. Gault, \textit{The International Legal Context of Petroleum Operations in Canadian Arctic Waters} 30 (1983)[hereinafter I. Gault, \textit{The Legal Context}].
\item[160.] See Canada Agreement, art. 1, \textit{reprinted in} I. Gault, \textit{supra} note 158, at 79 n.240.
\item[161.] Canada Agreement, art. 2, \textit{cited in} I. Gault, \textit{The Legal Context}, \textit{supra} note 159, at 31. The Canadian government intended to amend the AWPPA to include a provision benefiting U.S. claimants, but later decided that a guaranty agreement was more expeditious in light of the planned offshore exploration. 1977 \textit{House Debates} 5458, 5750, \textit{reprinted in} 16 \textit{Can. Y.B. Int'l L.} 434 (1978).
\item[162.] In such cases, the claimant's recovery is reduced to the extent that his conduct contributed to the incident. Arctic Waters Pollution Prevention Act, R.S.C. ch. 2, § 9 (1st Supp. 1970); Canada Agreement, art. 2, \textit{cited in} I. Gault, \textit{The Legal Context}, \textit{supra} note 159, at 31.
\item[163.] See Arctic Waters Pollution Prevention Regulation, Amendment, 1981 Can. Gaz. 447. "$\text{C}\"" represents Canadian dollars.
\item[164.] Canada Agreement, art. 2(d), \textit{cited in} I. Gault, \textit{The Legal Context}, \textit{supra} note 159, at 31.
\item[165.] \textit{Id.} Article 2(d) of the Canada Agreement permits recovery of the following: all costs and expenses of any action taken to repair or remedy any condition that results from a deposit of waste or to reduce or mitigate any damage to
Offshore operators in the Canadian Beaufort were required to demonstrate their financial responsibility not only under the basic liability provisions imposed by the AWPPA and Oil and Gas Act,\textsuperscript{166} but also under the added responsibility of the Canada Agreement. Canadian operators were obliged to post indemnity bonds to cover the extra amount of potential liability, and the government guaranteed the payment of the sums involved. This guaranty will hold the Canadian government liable on a subsidiary basis if the costs of a transfrontier pollution incident are not met by the bonding arrangement.\textsuperscript{167} The Canada Agreement serves, in theory, the same essential purpose as the United States OSPF, that of providing excess insurance. Unlike the United States scheme, however, no actual fund was created by the Canadian government to meet its potential liability under the Canada Agreement. Thus, questions regarding the Canadian government's ability to fund recoveries under the Agreement remain unaddressed.

IV. INADEQUACIES OF CURRENT COMPENSATION SCHEMES

A. Domestic Issues

1. \textit{Federal Plan}. While no claims have yet been presented to the Fund,\textsuperscript{168} it is but a matter of time before its provisions are triggered. Recovery for an oil pollution incident in the Beaufort Sea would present administrative difficulties for the managers of the Fund. Particularly problematic would be the federal government's dual role as the chief claimant for compensation of oil recovery costs and as public trustee for the restoration of the environment. The OSPF mechanism assumes a high level of coordination between various federal government entities. The Departments of Transportation (Coast Guard), Energy, and Interior would all have a role in any clean-up operation. One source of tension might arise from Native American interests in

\-------------------

\textsuperscript{167} See Handl, supra note 154, at 548.

\textsuperscript{168} Telephone interview with Frank Martin, Manager, Offshore Oil Pollution Fund, U.S. Coast Guard (July 2, 1986).
Their status was not contemplated by the legislature and would represent a significant conflict.

Furthermore, the quantum of recovery appropriate for environmental damage in the Beaufort's unique ecosystem is likely to be extraordinarily difficult to measure under the federal scheme that has no graduated system to account for environmental sensitivity. Finally, limiting the liability of offshore operators to $35,000,000 will be inadequate in the case of a catastrophic oil pollution incident in the area.

2. State Law. Alaska’s approach to providing compensation for a major pollution incident in the Beaufort warrants some criticism. First, Alaska’s required level of insurance for offshore operators, established even before the OSPF came into force, is $35,000,000. This proof of financial responsibility is identical to that of the federal scheme. These financial responsibility provisions were indicative of the statute’s larger purpose of providing an “'easy way for an individual Alaskan to collect for damages to his property or for loss of income due to an oil spill.'” The possibility exists, however, that in the event of an oil pollution incident, the required financial responsibility amount will be exhausted by the state before individuals are able to recover for their damages. Furthermore, the graduated penalty provisions coupled with the unlimited liability to the state for cleanup, removal, and restoration could produce damage awards to the state in

170. See supra notes 13-16 and accompanying text.
171. See supra notes 10-16 and accompanying text.
172. The Alaska scheme has not gone unchallenged. See Stock v. State, 526 P.2d 3 (Alaska 1974). In Stock, the Alaska Supreme Court rejected the plaintiff’s arguments that the prohibitions against pollution discharges were void for vagueness and that the penalty provisions violated due process by encouraging violators to plead guilty to a more serious violation in order to receive a lighter penalty. The court, however, held that the plaintiff had misconstrued the statute and had ignored the provision for ongoing penalties against a willful violator for continued pollution discharges. Aside from Stock, the Alaska oil pollution liability statute has not been challenged in Alaska courts.
173. See supra note 91 and accompanying text.
174. See supra notes 85-89 and accompanying text.
175. 1982 Op. Att’y Gen. Alaska No. 66-462 (May 13, 1982) (unpaginated) (available on LEXIS, States library, Allag file) (quoting remarks of William Publicover, Deputy Director of Environmental Quality Operations, Alaska Department of Environmental Conservation, in testimony on the legislation). The Attorney General’s opinion also stated that “'[w]e want the injured party to be able to go to state court, even small claims court, file his claim against someone who is attachable, someone who does business in Alaska, or who has an agent in Alaska, and we seek timely satisfaction of his claim.'” Id. (quoting Publicover). See also the legislative findings reported at ALASKA STAT. § 46.03.758(a)(2) (1982).
excess of the $35,000,000 limit. The problem, however, cannot be re-
dressed directly by any increase in financial responsibility require-
ments by the Alaska legislature. The federal Fund expressly preempts
any state requirements in excess of $35,000,000.176

The financial responsibility pitfall is aggravated by the fact that
private claimants are not given access to any state excess insurance
fund.177 Though the state does maintain a mitigation account, as pre-
viously indicated,178 its use is limited to expenses incurred by the state
and municipalities alone. Thus, private claimants under the Alaska
scheme are likely to be left without any recourse against polluters with
limited assets. Even if they were given access, current civil penalty
provisions that fund the state account seem to contemplate only low-
level point-source pollution.179 A blowout from an offshore explora-
tory well could spew thousands of barrels into the ocean. The penalty
per gallon, under such circumstances, quickly could escalate to a level
beyond $100,000,000. Yet the fund only allows for collection of up to
$100,000,000 in penalties.180 Clearly, if a blowout of this proportion
occurred, more would be needed in order to compensate adequately all
private claimants injured, in addition to compensating the state for
cleanup, removal, and restoration.

3. Proposed Solutions. There are several policy changes that
Alaska can pursue regardless of the application of the preemption doc-
trine in the oil pollution area. These include increased penalties for
operations within state territorial waters that recognize the special en-
vironmental sensitivity of the Beaufort, expansion of the financing and
availability of the state’s own mitigation account, and recognition of
the particular interests of the native peoples in the area. None of these
initiatives would run afoul of federal preemption, as would the state’s
unilateral increase of operators’ financial responsibility requirements.
If these initiatives were effectuated, an increase in offshore operator
financial responsibility would not be necessary.

Judicial characterization of the Beaufort marine environment will
be critical to the level of penalty collectable.181 While the Beaufort

---

176. See supra note 119 and accompanying text.
177. See supra note 46 and accompanying text.
178. Id.
179. See supra notes 75-77 and accompanying text.
180. ALASKA STAT. § 46.03.758(e) (1982).
181. The amount of the penalty per gallon of oil spilled varies according to the
characterization of the environment. For freshwater, the amount of the penalty is $10
per gallon; for confined saltwater, $2.50 per gallon; and for unconfined saltwater, $1
per gallon. Id. § 46.03.758(b)(1).
clearly is "an unconfined saltwater environment," that would currently be entitled to the lowest penalty,182 it is also a sensitive marine habitat for endangered species such as the Bowhead whale.183 In order to generate additional penalties in the event of a spill, the statute should either account for environmentally sensitive unconfined saltwater areas or at least characterize the Beaufort as a "confined saltwater" area.184

Furthermore, the Alaska legislature should open up the use of the state's mitigation account to meet the needs of private claimants in addition to serving as an auxiliary fund for clean-up expenses. This would require expansion of financing for the account and specific procedural provisions authorizing successful private claimants to draw upon it up to a specified limit. Some increased financing would result from classification of the Beaufort as an environmentally sensitive area. Another avenue might be to raise the $100,000,000 penalty cap.185 Neither of these measures should be seen as conflicting with federal law, provided that the statute also incorporated a provision clarifying that any funds recovered from the account would be deducted from possible recovery under the federal fund and vice-versa.186

In order to address fully the needs of private claimants, special recognition of native interests would be required.187 The needs of the Inupiat people who inhabit the Beaufort shore might not coincide with those of state authorities leading clean-up operations. Expanding the use of the state mitigation account to meet the needs of these communities would also seem to be well within the province of the state. Such an item, omitted from the federal agenda, would at least provide the natives on the Beaufort shore a more meaningful level of compensation at the state level and, perhaps, provide the incentive for the federal government to follow suit.

182. Id. § 46.03.758(b)(1)(C).
183. See supra note 15 and accompanying text.
184. ALASKA STAT. 46.03.758(f)(2) (1982) provides: "'Confined saltwater environment' means a bay, sound or other partially enclosed saltwater body in which flushing through tidal or current action is significantly restricted."
185. See supra notes 75-77 and accompanying text and text accompanying note 180.
187. The OSPF requires that the United States Attorney General bring an action on behalf of a group of claimants. Id. § 1813(b)(7). But see id. § 1813(c) (permitting any member of such group to bring class action if Attorney General fails to bring an action). The OSPF assumes, however, that the interests of the group of claimants and the federal government will be consonant, an assumption that has been disputed in past litigation concerning OCS leases in the Beaufort. See North Slope Borough v. Andrus, 642 F.2d 589, 611-13 (D.C. Cir. 1980); Jones, supra note 169, at 89-100.
In light of the federal restriction on requirements of financial responsibility, it seems that the financing of the Fund is particularly important in providing an adequate scheme for compensation. While increasing the penalty limitation in the Alaska scheme above $100,000,000 would not be a viable option if the state limitation were held to be preempted by the federal scheme's $10,000 limitation, such an application of the preemption doctrine is unlikely. As long as the Alaska penalty scheme does not directly demand higher proof of financial responsibility and does not allow double compensation, such an increase probably could withstand any preemption by the OSPF.

B. United States-Canadian Relations

Although it provides needed guidelines for immediate clean-up action in the event of an oil spill in the Beaufort, the Joint-Contingency Plan leaves several questions unanswered. For example, it provides no mechanism for payment of damages caused by a spill. Moreover, in the case that either or both parties were to proceed with exploratory drilling in the Beaufort's disputed area and a pollution incident occurred, the Joint-Contingency Plan does not provide for the imposition of liability on the nation authorizing the offending installation. Until the location of the marine boundary is determined, the Joint Plan cannot be invoked as a comprehensive compensation or liability regime between the two nations.

The express goal of Canada's modification of its liability and compensation law was to benefit Alaska claimants by establishing reciprocity between the pollution statutes of the United States and Canada. The treatment of foreign claimants under the OSPF does not necessarily represent a truly reciprocal regime with its Canadian counterpart. Unlike the provisions for natural resources under United States control, there is some question as to the proper foreign claimant under the OSPF for damage done to natural resources under the control of a foreign government. The OSPF defines foreign claimants as "any person residing in a foreign country, the government of a foreign country, or any agency or political subdivision thereof." In light of the specificity with which the OSPF defines the exclusive

---

188. 43 U.S.C. § 1820(b) (1982).
189. Id. § 1812(d)(3)(A).
190. See supra notes 126-27 and accompanying text.
192. The OSPF specifically designates the President as the exclusive claimant regarding damage to natural resources over which the federal government has sovereign rights. 43 U.S.C. § 1813(b)(3) (1982). Similarly, states are the sole claimants for damage to natural resources within their management. Id.
193. Id. § 1811(11).
United States claimants for damage to natural resources, the absence of a parallel provision designating either the federal or provincial government of a foreign country as the proper claimant for damage to natural resources makes the practical application of the Fund to foreign claimants somewhat ambiguous.194

In addition to confronting a narrower scope of recoverable damages than that found in the Canada Agreement,195 foreign claimants must also fulfill a number of procedural tests. First, a foreign claimant must prove that the "oil pollution occurred in or on the territorial sea, navigable waters or internal waters, or adjacent shoreline of a foreign country of which the claimant is a resident."196 This requirement potentially precludes claims for loss of profits from a commercial fishery located beyond a twelve-mile territorial sea. Claimants must also prove that the oil was discharged from a facility on the United States shelf197 and that they were not otherwise compensated for their losses.198

Most importantly, the OSPF requires that the foreign state provide similar, reciprocal remedies for United States claimants.199 Arguably, the Canada Agreement provides just such a remedy in the Beaufort. Although the two compensation schemes are not symmetrically in coverage, they are generally equivalent in other respects. One critical exception is that the Canada Agreement provides for only $C20,000,000 of compensation specifically available to foreign claimants.200 The whole of the United States Fund, up to $200,000,000, presumably would be available to foreign claimants in the case of a

194. Compare id. § 1813(b)(3) with id. § 1813(b)(6).
197. Id. § 1813(b)(6)(C). This provision would also apply to spills from operations in Alaska state waters.
198. Id. § 1813(b)(6)(B).
199. Id. § 1813(b)(6)(D). The rationale for this provision was made clear in the legislative history:

The intention of [the OSPF] is to protect domestic interests. To provide for payment to foreign countries or non-U.S. residents without a reciprocal arrangement in the foreign country would be unfair. Thus, clean-up costs or damages are not to be awarded to a foreign country or a non-U.S. resident unless there is a treaty or executive agreement authorizing payment of an equivalent or similar remedy for U.S. claimants for discharges off that foreign country's shelf.


200. Although $C40,000,000 is available under the AWPPA, see supra text accompanying note 163, these additional funds would be available to U.S. claimants only
catastrophic incident. Additionally, the Canada Agreement provides only a supplemental measure of liability; no other compensation funds could be used to meet the demands of United States claimants.\textsuperscript{201}

In light of the major disparity in compensation available under the two schemes, an American court probably would limit payment from the United States Fund to the maximum amount authorized by the Canadian Agreement, $C20,000,000. Reciprocity thus would be maintained even without a formal treaty or executive agreement between Canada and the United States. This remedy could not be preempted by any coordinate state's compensation scheme.

The United States government always should be able to recover from a party responsible for an oil spill the money that the government used to reimburse a foreign country for that nation's clean-up costs. Accordingly, the Second Circuit ruled in \textit{In re Oswego Barge}\textsuperscript{202} that the FWPCA did not preempt the federal government's claim against offenders for money which it reimbursed to Canada for clean-up costs in Canadian waters for a vessel-source pollution incident.\textsuperscript{203} By analogy, the OSPF should allow a disbursement to compensate for Canadian clean-up costs in the Beaufort, provided that, as a threshold matter, the Canada Agreement offers reciprocal terms. The decisive issue was whether the relevant United States statute preempted the remedy.\textsuperscript{204} The OSPF probably should not be construed to preempt reimbursements to a foreign claimant for either clean-up costs or payments of damages.

Until the international boundary delimitation is concluded, the process of harmonizing United States and Canadian law to provide reciprocal remedies will continue to be inadequate. It is apparent that the coordinate provisions of Canada's AWPPA and the United States' OSPF accidentally have interconnected to provide a narrow and financially limited remedy. The first step toward a meaningful resolution would be for the Secretary of State to certify the Canada Agreement as a reciprocal arrangement for the purposes of the OSPF. Next, the governments should coordinate the actual substantive elements of the two regimes. The most important component of this process should

\begin{footnotesize}
\begin{enumerate}
\item[201.] \textit{See supra} notes 159-65 and accompanying text.
\item[202.] 664 F.2d 327 (2d Cir. 1981).
\item[203.] \textit{Id.} at 344-45 (citing 116 CONG. REC. 9327 (1970) (remarks by Representative Cramer in debate on FWPCA, asserting that claims made by foreign countries would not be subject to limitation of liability)).
\item[204.] \textit{Id.} ("The FWPCA does not 'speak to' the problem of polluting foreign waters, and therefore no presumption of preemption arises.").
\end{enumerate}
\end{footnotesize}
be the inclusion of a Canadian provision for higher compensation limits for the benefit of foreign claimants.

V. CONCLUSION: A PRESCRIPTION FOR CONSISTENCY

Liability and compensation for offshore oil pollution in the Beaufort Sea is not yet fully developed. The potential for an international environmental disaster demonstrates the need to analyze the legal remedies available to victims in the context of overlapping jurisdiction.

The essential ingredient to developing a successful compensation system that can accommodate the risks and rewards of oil exploration in the Arctic is the resolution of the existing jurisdictional disputes. For Canada and the United States, this is a matter of diplomacy. The greatest potential for successful resolution of these jurisdictional problems lies in intensive negotiation by both nations.

When the current oil glut dissipates and petroleum prices begin to rise again, offshore exploration and production in the Beaufort Sea inevitably will resume. Only when this happens will the need for a resolution of this international dispute be apparent. Settlement of these issues, however, should not be delayed until the imminent potential for catastrophe exists and economic and political interests have come into greater conflict. A successful outcome may depend on achieving an agreement with Canada while the issue has the attention of the United States government and before the value of oil rights in the Beaufort Sea rises again or the collateral issue of Arctic sovereignty is involved.

As for federal preemption, the current liberal approach toward state legislation can accommodate an expansion of remedies more tailored to the needs of the region. The Alaska legislature is by far a better forum than Congress for classification of the Beaufort as an environmentally sensitive region and for recognition of the Inupiats' special needs. Augmenting the financing and availability of the state mitigation account would better protect the interests of all parties. Raising the $100,000,000 cap on the penalty provisions would also serve this purpose, as well as provide the incentive for more careful operations by major offshore oil operators. These changes will enhance oil spill compensation in the Beaufort in a more direct fashion than Alaska's current attempt to extend its jurisdictional authority. While Alaska's jurisdictional claims may be rejected by the Supreme Court, such a resolution need not be fatal to attempts to protect against the effects of offshore operations. Alaska can sacrifice its jurisdictional claims for greater freedom of action. Federal-state relations in this area need not be "all or nothing."

Incremental improvements in offshore operations in the Beaufort Sea would be acceptable if accompanied by careful planning. The
hurried tempo of exploration in the late 1970's, the subsequent bust, and expected developments in the future all indicate, however, that the pace of operations in the Arctic is anything but predictable. The development of a sufficient liability and compensation scheme will provide much needed protection for Alaska in the regulation of an industry operating just within the margin of safety on the last pristine American frontier.