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Environmental Salvage Law in the Age of the Tanker

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ENVIRONMENTAL SALVAGE LAW IN THE AGE OF THE TANKER

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I. INTRODUCTION

Does the current legal framework adequately encourage ships to try to protect other ships from a danger that, if realized, could result in the spillage of oil or other hazardous chemicals? This paper looks at the existing laws, treaties, and standard contracts that affect a ship owner's decision whether to attempt to salvage another vessel that is imperiled and at risk of spilling oil or other chemicals into the water. The specific legal issue is whether a salvage awards should reward salvagers for preventing the owner's property from causing environmental damage, at least when the owner would have been liable for such damage, had it occurred. This paper focuses on environmental salvage under American laws and treaties, and under Lloyd's Open Form agreements (which are governed by English law. Since these agreements are made in most contemporary salvage operations involving American interests, they are critically important to this discussion.)

To understand environmental salvage law, one must be familiar with the concept of liability salvage. Our discussion of liability salvage, however, requires a preliminary discussion of the fundamental principles of American salvage law. Accordingly, the first section of this paper begins with a summary of the fundamentals of traditional salvage law. Next, it examines several 19th century statutes that can limit the liability of shipowners, and then two important environmental laws that can give rise to liabilities that cannot be limited by those laws.

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Then, this paper looks at how the more recent Lloyd's Open Form agreements have given environmental salvagers some incentive to avert environmental liabilities, and evaluate whether those incentives are sufficient. It will examine some modern cases that have dealt with the related question of whether liability salvage should be recognized. Finally, this paper tries to answer the question of how environmental salvage awards might be computed.

II. BACKGROUND INFORMATION

A. *Traditional Salvage Law*

Maritime commerce, since ancient times, has been critical to the success and prosperity of peoples and nations. Seagoing vessels, whether built for trade or for war, have always been very expensive to construct and properly maintain. And while modern technology makes it easier for ships to avoid storms, our brightest scientists are scarcely better than the soothsayers of yore at predicting where the next big storm will arise. Then, as now, the safety of ships is all too often put into the grave dangers created by Mother Nature, and the errors of men. It is not surprising then, that maritime law has an ancient tradition of rewarding the owners, crews, and officers of ships that successfully rescue the property others from the destructive and unpredictable dangers associated with maritime activities. But computing such rewards is often far more difficult than the determination that the owner owes something to the salvager.

In *Blackwall*,¹ the Supreme Court explained many of the fundamentals of American salvage law. A salvager will not receive an award absent: (1) the presence of a maritime peril that threatens property with loss, destruction, or deterioration; (2) the provision of voluntarily rendered² salvaging services (in other words, the salvager cannot receive a salvage award if he had a pre-existing legal duty to provide the services, as he might under a contract); and (3) the successful recovery or protection of the threatened property.³

1. *Blackwall*, 77 U.S. 1 (1869).

2. *Sabine*, 101 U.S. 384 (1879).

3. *Id.*; see also Thomas Schoenbaum, *Admiralty and Maritime Law*, 2 Admiralty & Mar. Law § 16-1 (4th ed.) (noting that the property can be something as simple as an unattended log adrift in navigable waters. See *Whitmire v. Cobb*, 88 F. 91 (5th Cir. 1898); *Bywater v. A Raft of Piles*, 42 F. 917 (D. Wash. 1890).

Also, a salvager will not receive an award if the owner (or his agent,) acting prudently, communicates a refusal to the salvager before he saves the property.⁴

The third requirement is often expressed through the phrase “no cure-no pay,” which has long been an important and defining characteristic of both American and British salvage law.⁵ The law does not reward failed or partially successful salvage attempts,⁶ but a salvager who successfully saves *some* of the property can still receive an award for it, based on its post-salvage value. (If a fire causes \$45 million in damages to a \$50 million yacht before a salvager successfully puts it out, the salvager has successfully protected \$5 million of the owner’s property. The \$45 million loss does not generally prejudice the salvager with respect to an award for the value he did protect.) Of course, the salvager and prospective salvagee can, by contract, agree to a specific amount of compensation.

In *Blackwall*, the Supreme Court not only explained the requirements of a valid salvage claim, it also discussed the purpose of salvage awards and the factors courts use in fixing their amounts. The award for “pure” salvages is not based on contract law,⁷ and it is also not considered a quantum meruit type of payment for the value of the service rendered.⁸ Instead, salvage awards are meant to encourage “seamen and others to embark in such undertakings to save

4. *Tidewater Salvage, Inc. v. Weyerhaeuser Co.*, 633 F.2d 1304 (9th Cir. 1980) (holding that a salvager cannot receive a salvage award for saving property if, before commencing the salvage, he knew that the property belonged to an owner who did not want him to salvage the property *and* that such refusal was not imprudent); *but see Merritt & Chapman Derrick & Wrecking Co. v. U.S.*, 274 U.S. 611, 613 (1927) (stating that if no reasonable person would have refused the salvager’s help, the law will disregard the refusal).

5. Martin J. Norris, *Benedict on Admiralty: The Law of Salvage* § 159, at 12-1 to 12-3 (1997).

6. *Blackwall*.

7. Indeed, if the salvager has a contractual obligation to attempt the salvage, it is his legal *duty* to do so. The contract compels his action, it is not voluntary. *See W. Coast Shipping Brokers Corp. v. Ferry “Chuchequero”*, 582 F.2d 959, 960 (5th Cir. 1978).

8. *Blackwall*, 77 U.S. at 14 (stating that “[c]ompensation as salvage is not viewed by the admiralty courts merely as pay, on the principle of a quantum meruit, or as a remuneration PRO OPERE ET LABORE, but as a reward given for perilous services, voluntarily rendered, and as an inducement to seamen and others to embark in such undertakings to save life and property.”).

life⁹ and property.”¹⁰ It also listed six factors that courts of admiralty will “usually consider” the “main ingredients” in the computation of a salvager’s award:

- “(1) The labor expended by the salvors in rendering the salvage service.
- (2) The promptitude, skill, and energy displayed in rendering the service and saving the property.
- (3) The value of the property employed by the salvors in rendering the service, and the danger to which such property was exposed.
- (4) The risk incurred by the salvors in securing the property from the impending peril.
- (5) The value of the property saved.
- (6) The degree of danger from which the property was rescued.”¹¹

The Supreme Court did not say that its list of factors was an exhaustive enumeration of the circumstances admiralty courts may consider in computing all salvage awards. To the contrary, the Court said that the factors were ones that courts “*usually* consider the following circumstances ... the *main ingredients*”¹² (emphasis added) of a salvage award. The Court seems to have recognized that in other circumstances, some other factor or factors would be very important in setting the salvage award.

The Court in *Blackwall* awarded a moiety (half) of the value of the salvaged property to the salvager, and said that the defendant shipowner would presumptively retain the other moiety. The Court left open the possibility that the other salvaging party, a fire department, could bring a successful salvage suit for the other moiety. (The Court did not pass judgment on whether such a suit could succeed, it merely stated that if the fire department did not seek a salvage re-

9. Despite the fact that *Blackwall* states that salvage awards are meant to encourage the saving of lives at sea, courts have refused to allow salvage awards for “pure life” salvages – salvages in which no property is saved, only human life. However, when courts imply the existence of a maritime contract, the salvager may be able to receive a *quantum meruit* award under quasi-contract theory. *Peninsular & Oriental Steam Nav. Co. v. Overseas Oil Carriers, Inc.*, 553 F.2d 830, *cert. denied*, 434 U.S. 859 (1977).

10. *Blackwall*, 77 U.S. at 14. See *supra* note 8.

11. *Id.* at 13, 14.

12. *Id.*

ward, the shipowner would definitely be allowed to retain the other half of the ship's value.)¹³ The Second Circuit would later speculate, in dictum, that salvage awards should seldom be higher than a moiety of the property salvaged,¹⁴ and has subsequently halved at least one district court's salvage award.¹⁵ But the Fourth Circuit has held that a moiety is neither a ceiling nor a floor on salvage awards.¹⁶

In salvage awards that are determined under Article 13 of the International Convention on Salvage,¹⁷ ("1989 Convention") the factors that courts consider are very similar to those mentioned in *Blackwall* language, the phrasing of Article 13 seems to indicate that

13. *Id.* at 15 (stating that "we express no opinion whether the other moiety may or may not be claimed by the fire department; but if not, then it enures to the shipowners.").

14. *High Cliff*, 271 F. 202, 204 (2d Cir. 1921) (commenting that "[t]he highest compensation ordinarily allowed in the most meritorious cases is one moiety, which is rarely given except in the case of a derelict. While seldom more than one-half or less than one-third is given there are many cases in which the award has been under 5 per cent.").

15. *W. E. Rippon & Son v. U. S.*, 348 F.2d 627, 630 (2d Cir. 1965) (holding that as "[a]dequate yardsticks are peculiarly lacking in determining salvage ... the result reached by ... Solomon may well supply the guide." The Second Circuit reduced the trial court's award by approximately half. It cited *High Cliff*, 271 F. 202, where it had previously halved a district court's salvage award.).

16. *Columbus-Am. Discovery Group v. Atlantic Mutual Ins. Co. (The Central America II)* 56 F.3d 556 (4th Cir. 1995), *cert. denied*, 516 U.S. 938 (1995) (holding that the so-called moiety rule, under which "a successful salvor, as a matter of course [would be awarded] one-half of the imperiled goods salvaged from the derelict vessel" did not constitute an upper limit on a salvager's award.). It should be noted that this case dealt with a vessel that had sunk over a hundred years before the gold in its cargo was "salvaged." It can be reconciled with *High Cliff*, 271 F. 202, 204 because the salvage of the *Central America* was anything but an ordinary case (stating that "[t]he highest compensation *ordinarily* allowed in the most meritorious cases is one moiety") (italics added). The parties claiming to be the owners of the cargo (gold) in *Columbus-Am. Discovery Group* included several insurance companies and their successors; but apparently the documents that might have proved their ownership had been lost or destroyed in the hundred plus years since the *Central America* sank. The Fourth Circuit held that the salvager could keep all of the gold, except whatever the underwriters could prove belonged to them. It seems unlikely that the underwriters would be able to prove any continuing ownership interest without the documents that had long since been lost, so the salvager probably received all of the gold. (Oddly, no descendants of any of the passengers seem to have come forward demanding their relatives' gold.).

17. International Convention on Salvage, Art. 13, available at <http://www.jus.uio.no/lm/imo.salvage.convention.1989/doc.html#61>.

courts *must* consider *all* of its factors, and only those factors.¹⁸ There are two other significant differences between Article 13 of the 1989 Convention and *Blackwall*. Under the former, the salvor's maximum award is clearly limited by the value of the salvaged property,¹⁹ while the latter does not explicitly mention any ceiling on salvage awards.²⁰ Another important difference is that the 1989 Convention's list of factors takes into account the efforts and skill of the salvor in "preventing *or* minimizing" (emphasis added) environmental damage.²¹

18. *Id.* Article 13: Criteria for Fixing the Reward: (1) The reward shall be fixed with a view to encouraging salvage operations, taking into account the following criteria without regard to the order in which they are presented below:

(a) the salvaged value of the vessel and other property; (b) the skill and efforts of the salvors in preventing or minimizing damage to the environment; (c) the measure of success obtained by the salvor; (d) the nature and degree of the danger; (e) the skill and efforts of the salvors in salvaging the vessel, other property and life; (f) the time used and expenses and losses incurred by the salvors; (g) the risk of liability and other risks run by the salvors or their equipment; (h) the promptness of the services rendered; (i) the availability and use of vessels or other equipment intended for salvage operations; (j) the state of readiness and efficiency of the salvor's equipment and the value thereof. (2) Payment of a reward fixed according to paragraph 1 shall be made by all of the vessel and other property interests in proportion to their respective salvaged values. (3) The rewards, exclusive of any interest and recoverable legal costs that may be payable thereon, shall not exceed the salvaged value of the vessel or other property.

19. Note that any interest or legal costs awarded pursuant to art. 13 are not subject to this cap on awards. *See id.* at art. 13, (3). It is very important to note that salvages under art. 14 are based on the "salvager's expenses," *not* the value of the salvaged property. *See id.* at art. 14.

20. *Blackwall*, 77 U.S. 1 at 15; *see supra*, quoted text at note 13.

21. International Convention on Salvage, available at <http://www.jus.uio.no/lm/imo.salvage.convention.1989/doc.html#61>. Article 14: Special Compensation: (1) If the salvor has carried out salvage operations in respect of a vessel which by itself or its cargo threatened damage to the environment and has failed to earn a reward under article 13 at least equivalent to the special compensation assessable in accordance with this article, he shall be entitled to special compensation from the owner of that vessel equivalent to his expenses as herein defined. (2) If, in the circumstances set out in paragraph 1, the salvor by his salvage operations has prevented or minimized damage to the environment, the special compensation payable by the owner to the salvor under paragraph 1 may be increased up to a maximum of 30% of the expenses incurred by the salvor. However, the tribunal, if it deems it fair and just to do so and bearing in mind the relevant criteria set out in article 13, paragraph 1, may increase such special compensation further, but in no event shall the total increase be more than 100% of the expenses incurred by the salvor. (3) Salvor's expenses for the purpose of paragraphs 1 and 2 means the out-of-pocket expenses reasonably incurred by the salvor in the salvage operation and

B. Limitation of Liability

In 1848, the Supreme Court decided a case that significantly affected American shipowners; *The Lexington*.²² It held that unless the ship and cargo owners expressly agreed otherwise, the shipowner insured the cargo's owner against *any* and all damages that the cargo might suffer "in the course of the conveyance," *except* damages resulting from "the act of God or the public enemy."²³ This prevented shipowners from unilaterally restricting their liability for damage to the cargo that their ships carried. In 1734, the Parliament of Great Britain enacted a law to protect shipowners from being liable to cargo owners for thefts by the ship's officers and crew²⁴ and about fifty years later it amended the law to provide more protection.²⁵ About thirty years after that, Parliament amended it to limit shipowner liability in collisions (including ones caused by negligence).²⁶ In 1819, the legislature of Massachusetts enacted a statute limiting the liability of shipowners,²⁷ which was similar to the English Limitation Act as it was in 1786, as opposed to the more recently amended 1813 version.²⁸ When Maine separated from Massachusetts and became an American State in 1820 (as per the Mis-

a fair rate for equipment and personnel actually and reasonably used in the salvage operation, taking into consideration the criteria set out in article 13, paragraph 1 (h), (i) and (j). (4) The total special compensation under this article shall be paid only if and to the extent that such compensation is greater than any reward recoverable by the salvor under article 13. (5) If the salvor has been negligent and has thereby failed to prevent or minimize damage to the environment, he may be deprived of the whole or part of any special compensation due under this article. (6) Nothing in this article shall affect any right of recourse on the part of the owner of the vessel.

22. *N.J. Steam Navigation Co. v. Merchants' Bank of Boston (The Lexington)* 47 U.S. 344 (1848).

23. *Id.* at 381.

24. See Joseph C. Sweeney, *Limitation of Shipowner Liability: Its American Roots and Some Problems Particular to Collision*, 32 J. Mar. L. & Com. 241, 244 (2001) at note 17 (citing 7 Geo. 2 c. 15 (1734) and characterizing it as dealing with "losses to shippers from theft by master or crew.").

25. *Id.* at 244, n. 18, (citing 26 Geo. 3 c. 86 (1786) and characterizing it as being concerned with "loss by fire as well as theft by other than master or crew.").

26. *Id.* at 244, n. 20, 245, (citing An Act to Limit Responsibility of Ship Owners in Certain Cases, 53 Ge. 3 c. 159 (1813)).

27. An Act to encourage Trade and Navigation within this Commonwealth, 1819 Mass. Acts 193.

28. Sweeney, *supra* note 24, at 245, n. 24.

souri Compromise) it passed its own act to limit shipowner liability soon after, in 1821.²⁹

In 1851, Senator Hannibal Hamlin of Maine (who would later become the first vice president of the first Republican president, Abraham Lincoln)³⁰ introduced a bill to respond to *The Lexington*, and supersede its rule that shipowners are the insurers of their ships' cargo; and to give American shipowners a similar level of protection against liabilities to that enjoyed by their British and Dutch competitors.³¹ He successfully marshaled enough Congressional support for it to become law, (it is commonly referred to as the Limitation of Liability Act,) one which has been amended, but not repealed.³² In its current form, it limits the liabilities of shipowners to their ownership interest the ship, (plus any freight she has on board,) with regards to any liability involving the ship; generally subject to two exceptions.³³

If the liability is for personal injury or death, and the owner's interest in the ship is not enough to satisfy that liability, he can be held liable for an additional \$420 per gross ton³⁴ of the vessel (*unless* the vessel is a pleasure yacht, tug, towboat, towing vessel, tank vessel, fishing vessel or the tender of such, a self-propelled lighter, a nondescript self-propelled vessel, a canal boat, scow, car float, barge, lighter or a nondescript non-self-propelled vessel.)³⁵ The second general exception is that the act does not limit liabilities that occurred with the "privity or knowledge"³⁶ of the owner or owners.³⁷

29. An Act respecting the willful destruction and casting away of ships and cargoes; the custody of shipwrecked goods, and trade and navigation, 1821 Me. Laws 78, §§ 8-10, revised in 1840, 1857 and 1930.

30. *Supra* note 24, at 241, n. 2.

31. *Id.* at 244, 255-56.

32. Act of March 3, 1851, ch. 43, 9 Stat. 635, Rev. Stat. §§ 4282-4290, as amended.

33. 46 U.S.C.A. App. § 183 (Stating that "(a) The liability of the owner of any vessel, whether American or foreign, for any embezzlement, loss, or destruction by any person of any property, goods, or merchandise shipped or put on board of such vessel, or for any loss, damage, or injury by collision, or for any act, matter, or thing, loss, damage, or forfeiture, done, occasioned, or incurred, without the privity or knowledge of such owner or owners, shall not, except in the cases provided for in subsection (b) of this section, exceed the amount or value of the interest of such owner in such vessel, and her freight then pending.").

34. *See id.* at (c), (f).

35. *See id.* at (b)-(f).

36. "Privity or knowledge" is distinct from the legal doctrine of *respondet superior*. It "is a single term that identifies the personal fault that law or contract

Of course, Congress can also create causes of action through new statutes and specify that the Limitation of Liability Act does not apply to liability arising under those statutes.

Many of the biggest claims made against shipowners are made by the owners of the ship's cargo. So perhaps it is not especially surprising that Congress also passed other statutes that allow shipowners to limit their liabilities to cargo owners. While the Limitation of Liability Act can limit shipowners' liability to cargo owners, these other statutes can apply in situations where the Limitation of Liability Act does not. These federal statutes³⁸ are the Harter Act,³⁹ the Carriage of Goods by Sea Act,⁴⁰ and the Fire Statute.⁴¹

But much has changed since the time the Limitation of Liability Act was signed into law. In the 20th century, one can set up a separate limited liability corporation for each ship one owns – admiralty law will usually only subject the immediate corporate owner to unlimited liability⁴² (therefore, the umbrella company's liability with respect to any one ship is generally limited by the value of the subsidiary company that directly owns that particular ship.) Also, modern P & I clubs provide relatively inexpensive insurance to shipowners; almost all oceangoing ships today have coverage from them.

In light of these modern protections available to shipowners, it may be time for Congress to give the Limitation of Liability Act a burial at sea. The Fifth Circuit Court of Appeals felt that it was very outdated and unfair, and that it ought to be construed narrowly.⁴³ Four justices of the Supreme Court also criticized the Limitation of Liability Act as being unjust to injured seamen and contrary to the modern way that Congress subsidizes industries (by giving them

fastens upon the shipowner, as distinguished from" *respondeat superior*. Nicholas J. Healy, et al, *Cases and Material on Admiralty*, 848-49 (4th ed. 2006).

37. 46 U.S.C.A. App. § 183, *supra* note 33, at (a).

38. Healy, *supra* note 36, at 842.

39. The Harter Act, 46 App. U.S.C.A. §§ 190-96.

40. The Carriage of Goods by Sea Act, 46 App. U.S.C.A. §§ 1300 et seq.

41. The Fire Statute, 46 U.S.C.A. App. § 182.

42. *See* *Kilkenny v. Arco Marine Inc.*, 800 F.2d 853 (9th Cir. 1986) (applying the same corporate veil piercing / alter ego test used in non-maritime cases).

43. *Continental Oil Co. v. Bonanza Corp.*, 706 F.2d 1365, 1376 (5th Cir.1983) (en banc); *University of Texas Medical Branch v. United States*, 557 F.2d 438, 441 (5th Cir.1977), *cert. denied*, 439 U.S. 820, 99 S.Ct. 84, 58 L.Ed.2d 111 (1978).

public funds and/or tax breaks).⁴⁴ It is important to note that these dissenting justices believed the Limitation of Liability Act was outdated over half a century ago, as *Maryland Casualty Co. v. Cushing* was decided in 1954. Contemporary legal scholars continue to criticize the statute as being unfair and unjustifiable in the modern world, even if it might have been desirable when it was enacted.⁴⁵

C. *Relevant Federal Environmental Statutes (of the United States)*

1. Comprehensive Environmental Response, Compensation and Liability Act⁴⁶ (“CERCLA”)

There are many provisions in the CERCLA; the ones relevant to this discussion hold entities that release or threatened release of “hazardous substances” (the definition of which is provided *infra*) strictly liable⁴⁷ for the government’s costs in removing them. *Additionally*, they hold such individuals strictly liable for pollution damage to natural resources, the reasonable costs of estimating those damages, the costs of health assessments to determine the health effects of the pollution, *and* interest that accrues on those costs.⁴⁸

44. *Md. Cas. Co. v. Cushing*, 347 U.S. 409, 427, 74 S. Ct. 608, 623 (1954) (Black, J., dissenting) (“Judicial expansion of the Limit[ation of] Liability Act at this date seems especially inappropriate. Many of the conditions in the shipping industry which induced the 1851 Congress to pass the Act no longer prevail. . . . If shipowners really needed an additional subsidy, Congress can give it to them without making injured seamen bear the cost.”).

45. See Sweeney, *supra* note 24 at 277 (“While the dismal science of economics may have provided the justification for the original enactment of the Limitation of Liability Act, at a time when insurances were primitive and vessel owners knew nothing about their investments for months at a time, protections available to the shipping industry are far greater today, so natural law and justice cry out against preserving investors at the expense of innocent victims.”).

46. Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C.A. §§ 9601-9675 (2002) [hereinafter CERCLA]. *But see* Reardon v. U.S., 947 F.2d 1509 (1st Cir. 1991) (holding that provisions of § 9607 that purportedly allowed the government to secure liens against property without requiring that the government first provide the property’s owner with notice and a pre-deprivation hearing were unconstitutional. However, the rest of CERCLA was left intact – the overruled portion is not relevant to the subject matter of this paper.).

47. There are several defenses available to defendants, which are discussed *infra*. However, they are so difficult to establish that CERCLA’s standard, in the view of the author, is one of strict liability.

48. CERCLA, 42 U.S.C.A. § 9607.

The CERCLA only applies to materials that are within its definition of "hazardous substances." Hazardous substances *do not* include petroleum or fractional components of crude oil *except for* components of crude oil that have been specifically listed or designated under subparagraphs (A)-(F) of paragraph 14 of 42 U.S.C.A. § 9601.⁴⁹ Also, "the term [hazardous substances] does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas.)"⁵⁰

The CERCLA specifies that no defenses apply against it, *except* those defenses it specifically enumerates (which are complete defenses.) The three defenses require that the defendant establish (by a preponderance of the evidence) that the pollution's release or threatened release was *solely* caused by: an act of God, an act of war, or the act of a third party (or a combination of the three.)⁵¹

However, to make a "solely caused by a third party" defense, the defendant must establish that: (1) the third party was *not* his employee or agent, (2) the third party's action or omission was *not* in connection with a direct or *indirect* contractual relationship with him, (or if the act or omission *was* in connection with a direct or indirect contractual relationship between the defendant and the third party, that it was the *sole* contractual arrangement, that it was between the defendant and a *common carrier by rail, and* the contract arose from a *published tariff*), and (3) by a preponderance of the evidence, the defendant took due care in light of all the facts and circumstances (including the characteristics of the substance), *and* that he took precautions against the foreseeable acts and omissions of the third party *and* their foreseeable consequences.⁵² These defenses are not easily made.

The Limitation of Liability Act does not apply to CERCLA liabilities, only special CERCLA liability caps do.⁵³ Two of these liability caps relate to ships (except "incineration vessels," whose damages are capped at the "costs of response" plus \$50 million.) The liability cap for ships with no hazardous substances as cargo or residue is the greater of \$300 per gross ton of the vessel, or \$500,000. If the vessel

49. CERCLA, 42 U.S.C.A. § 9601 at ¶ 14.

50. *Id.*

51. *Id.* at (b). *See also Id.* at (h) (explicitly stating that its liability will be imposed "notwithstanding any provision of the Act of March 3, 1851." This refers to the Limitation of Liability Act.).

52. CERCLA, 42 U.S.C.A. § 9607 (b), (h).

53. *Id.* at (c).

has *any* hazardous substance as cargo or residue, the damage cap is the greater of \$300 per gross ton of the vessel or \$5 million.⁵⁴

However, the CERCLA's liability caps are not automatically applied. They do not apply when: the release or threatened release of the hazardous substance was "the result of willful misconduct or willful negligence within the privity of knowledge" of the owner or operator ("willful negligence" seems to be an oxymoronic term; but it might mean "gross negligence,") or, if the primary cause of the release or threatened release of the hazardous substance was a violation of the applicable (federal) safety, construction or operating standards or regulations (within the privity or knowledge of the owner or operator;) or if the owner or operator has failed to provide *all* reasonable assistance and cooperation requested by the responsible government official.⁵⁵ If the owner or operator is asked by the President to remove or remediate the hazardous substance and "fails without sufficient cause," he can also be held liable for punitive damages, ranging from one to three times the EPA's costs incurred as a result of the failure.⁵⁶

2. Oil Pollution Act of 1990⁵⁷ ("OPA 90")

The *Torrey Canyon*, completed in 1959, was once the largest ship of her day. Unfortunately, in 1967 she set a different world record – for the most barrels of crude oil spilled (120,000 tons.)⁵⁸ An even worse oil spill was caused by the *Amoco Cadiz* in 1978.⁵⁹ The *Amoco Cadiz* was a 1,095 feet long, 167 feet wide supertanker carrying approximately 220,000 tons of Iranian crude oil when she broke apart off the coast of Brittany, France. Most of her cargo was spilled, and approximately 180 miles of Brittany's shorelines were contaminated. The crude oil damaged Brittany's beaches, which had been a very popular tourist destination, and numerous oyster and lobster beds were also ruined. France estimated that its damages were about \$100 million (in 1978 dollars.)⁶⁰

54. *Id.* at (c) (1).

55. *Id.* at (c) (2).

56. *Id.* at (c) (3).

57. Oil Pollution Act of 1990, 33 U.S.C.A. §§ 2701-2761.

58. *See* *Esta Lata Charters, Inc., v. Ignacio*, 875 F.2d 234, 239, n. 10 (9th Cir. 1989).

59. *In re* Oil Spill by the *Amoco Cadiz* Off the Coast of France on March 16, 1978, 794 F.Supp. 261 (N. D. IL 1992); *aff'd*, 4 F.3d 997 (7th Cir. 1993).

60. *Id.*

Throughout the 1960's, 70's, and 80's, there were numerous other major oil spills involving oil tankers. But to the average American, the most infamous oil spill was the one caused by the *Exxon Valdez* in the Prince William Sound in 1989. While en route from Alaska to California, the *Exxon Valdez* crashed into the Bligh Reef, breaching her hull.⁶¹ Fortunately she was not carrying a full load, but she still managed to spill about 11 million gallons of crude oil into the Prince William Sound, contaminating its waters and nearby shores. The accident was the subject of extensive litigation, some of which has only recently been resolved,⁶² and some of which is still pending – the Supreme Court has granted certiorari in one lawsuit related to the incident.⁶³ The accident caused Exxon to incur billions of dollars in liability and greatly increased the public's awareness of the environmental dangers posed by oil spills.

Perhaps the public's outcry over the *Exxon Valdez* oil spill made Congress more willing to make the compromises necessary to pass OPA 90. The main disagreement, which delayed the bill's passage for years, was whether to include a provision that would allow states to exclude its effects within their waters. Currently, OPA 90 exempts from its coverage any discharge of oil "permitted by a permit issued under Federal, State, or local law."⁶⁴

OPA 90 defines oil as "oil of any kind or in any form, including petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil" but *not* anything considered a "hazardous substance" under the CERCLA.⁶⁵ Thus, CERCLA and OPA 90 are mutually exclusive with regards to any given substance. Within the context of these two laws, something that is an "oil" is not a "hazardous substance," and vice versa. (Of course, if a vessel spilled "oil" *and* a "hazardous substance," both CERCLA and OPA 90 could apply.) Note that even vegetable oil and animal oils are considered "oil" under OPA 90; but the head of the EPA is required to establish separate guidelines that treat spills of those kinds of oils differently than it treats spills of petroleum-type oils.⁶⁶

61. See *State v. Hazelwood*, 866 P.2d 827 (AK 1993).

62. *In re Exxon Valdez*, 484 F.3d 1098 (9th Cir. 2007).

63. *Exxon Shipping Co. v. Baker*, 128 S. Ct. 492 (2007).

64. 33 U.S.C.A. § 2702 (c) (1). See also *id.* at (c) (2), (3) (exempting discharges by public vessels, as well as onshore facilities subject to the Trans-Alaska Pipeline Authorization Act, 43 U.S.C. §§ 1651 et seq.).

65. 33 U.S.C.A. § 2701, ¶ 23 (2004).

66. 33 U.S.C.A. § 2720 (1995).

Under OPA 90, owners and operators of seagoing vessels (as well as oil rigs and other facilities) are held strictly liable for the removal costs and damages resulting from the oil they discharge into the water⁶⁷ (unless the discharge was exempt under 33 U.S.C.A. § 2702 (c).) “Damages” include injuries to natural resources, real or personal property, the subsistence use of natural resources (whether or not the claimant owns the resources, and regardless of who manages them,) lost government revenues and/or taxes, lost profits and diminished earning capacity, and the increased costs of providing public services during or after removal services.⁶⁸

OPA 90 allows a similar set of defenses to those allowed by CERCLA. The complete defenses under OPA 90 are worded almost identically to the language used in CERCLA, except that the word “oil” is used instead of the phrase “hazardous substance.”⁶⁹ These defenses do not apply if: the defendant was required by law to report the oil spill and failed to do so, if the defendant knew or should have known about the spill; the defendant failed to provide all reasonable cooperation and assistance requested by the responsible government official in connection with the removal activities, or if the defendant fails to comply with a 33 U.S.C.A. 1321 (c) or (e) order, or an order made pursuant to the Intervention on the High Seas Act, 33 U.S.C. 1471 et seq.⁷⁰

The Limitation of Liability Act does not apply to OPA 90 liability.⁷¹ Much like CERCLA, OPA 90 has its own set of damage caps. But with regards to specific claimants (apparently even if the claimant is the Federal government), the defendant is not liable to the extent that *the claimant's* own gross negligence or willful misconduct caused the spill or threatened spill.⁷² For deepwater ports and any onshore facilities, the liability cap is \$350 million.⁷³ For all offshore facilities, the cap is \$75 million plus the removal costs.⁷⁴ For non-tank vessels, the cap is \$950 per gross ton of the vessel or \$800,000,

67. 33 U.S.C.A. § 2702.

68. 33 U.S.C.A. § 2702 (b) (2) (A)-(F).

69. 33 U.S.C.A. § 2703 (a) *compare to* 42 U.S.C.A. § 9607 (b).

70. 33 U.S.C.A. § 2703 (c).

71. 33 U.S.C.A. § 2704 (a). (“Except as otherwise provided in this section, the total liability of a responsible party under § 2702 of this title ... shall not exceed ...”).

72. 33 U.S.C.A. § 2703 (b).

73. 33 U.S.C.A. § 2704 (a) (4).

74. *Id.* at (a) (3).

whichever is greater.⁷⁵ The liability caps for tank vessels are calculated using a somewhat more complicated formula.

For single-hulled tankers (including ones with double-hulled bottoms only, or double-hulled sides only) the cap is the greater of \$3,000 per gross ton of the vessel's weight⁷⁶ or \$6 million if the vessel weighs fewer than or exactly 3,000 gross tons, or \$22 million if the vessel weighs more than 3,000 gross tons.⁷⁷ For multi-hulled tankers,⁷⁸ the liability cap is \$1,900 per gross ton of the vessel's weight⁷⁹ or \$4 million if the tanker weighs less than or exactly 3,000 gross tons, or \$16 million if the tanker weighs more than 3,000 gross tons.⁸⁰ These caps don't apply in circumstances where the defendant would be barred from raising any 33 U.S.C.A. § 2703 (a) defenses by 33 U.S.C.A. § 2703 (c),⁸¹ when the defendant operator, or his employee, or agent, or a party acting pursuant to a contract with the defendant, unless that party was a common carrier by rail and the sole contractual arrangement involved was between them, and the spill or threatened spill arose in connection with that contract, proximately causes the spill or threatened spill through his gross negligence or willful misconduct, or when the defendant operator has violated an applicable federal safety, operating or construction regulation,⁸² or to certain other defendants.⁸³

III. THE MODERN TREND TOWARDS ENVIRONMENTAL LIABILITY SALVAGE

A. Historical Legal Background – Non-Property Salvage

The law of salvage is meant to provide an incentive for ships and their crews to protect the property of others, and to discourage them

75. *Id.* at (a) (2).

76. *Id.* at (a) (1) (A).

77. *Id.* at (a) (1) (C).

78. The drafter of this provision appears to have anticipated the possibility of oil tankers being built with more than two layers of material between the oil inside the tanker, and the water outside of it. Such tankers would not be treated as single-hulled tankers.

79. 33 U.S.C.A. § 2704 (a) (1) (B).

80. *Id.* at (a) (1) (C).

81. *Id.* at (c). Compare 33 U.S.C.A. § 2704 (c) (2) with 33 U.S.C.A. § 2703 (c).

82. 33 U.S.C.A. § 2704 (c) (1).

83. *Id.* at (c) (3) - (4).

from embezzling the property after successfully protecting it.⁸⁴ The value of the property that was saved by the salvager is arguably the most important element amongst the *Blackwall* factors,⁸⁵ as the purpose of salvage law is to encourage the preservation of properties that are subject to marine perils. *Blackwall* also seemed to believe that salvage law was meant to encourage the saving of lives,⁸⁶ but at the time that decision was handed down, (1869) the idea that tortfeasors could be held liable to the families of those killed by their torts was still very new to the common law world.⁸⁷ Because the shipowner could not be liable to one of his seamen if he had perished, he didn't receive any financial benefit from the salvager if only lives were saved, and no property; (at least, not under federal law, until 1920.)⁸⁸ The traditional, formalistic reason for not allowing a deceased seaman's family to recover (or any deceased tort victim's family, for that matter) was that the plaintiff's claim was personal to him, and could not survive after his death.⁸⁹ However, the power of this harsh common law rule began to wane when the Parliament of

84. *Blackwall*, 77 U.S. at 14. See also *R.M.S. Titanic, Inc. v. The Wrecked and Abandoned Vessel*, 435 F.3d 521, 531 (4th Cir. 2006) (noting that "without some promise of remuneration, salvors might understandably be reluctant to undertake the often dangerous and costly efforts necessary to provide others with assistance.").

85. See *Margate Shipping Co. v. The M/V J.A. Orgeron (The Cherry Valley)*, 143 F.3d 976, 987 (5th Cir. 1998) (commenting that the value of the property saved is "clearly one of the most important of the *Blackwall* factors, and must be accorded substantial deference in the calculation of any award.").

86. *Blackwall*, 77 U.S. at 14 (stating that "[c]ompensation as salvage is not viewed by the admiralty courts merely as pay ... but as a reward given for perilous services, voluntarily rendered, and as an inducement to seamen and others to embark in such undertakings to save *life* and property."), (*Italics supplied*).

87. See Lord Campbell's Act, 9 & 10 Vic. c.93 (1846).

88. Death on the High Seas Act, 46 U.S.C. §§ 761-768.

89. *The Highland Light*, (Chase 150), 12 F. Cas. 138, 139 (C.C. Md. 1867) (No. 6477) (discussing the origins of Lord Campbell's Act and the traditional reason for not allowing wrongful death actions. Also holding that Maryland's broadly worded wrongful death statute could not sustain an action *in rem* against the ship upon which the death occurred.); compare to *McDonald v. Mallory*, 77 N.Y. 546 (1879) (holding that New York's broadly worded wrongful death statute, which spoke in general terms, allowed a wrongful death action to be brought *in personam* against the shipowner in New York state court, by the family of a seaman whose death (on the high seas) was allegedly caused by his employer's negligently loaded petroleum cargo, at least in cases where the vessel was registered in and hailed from a New York port, the tortfeasor and seaman were both citizens of New York, and the seaman had been employed by a New York company).

the United Kingdom passed Lord Campbell's Act⁹⁰ in 1846; by 1970 every U.S. state had enacted a wrongful death statute.⁹¹ (Also, in 1970, the Supreme Court held that wrongful death claims could be brought under general maritime law, in cases where the death was caused by the violation of maritime duties.)⁹²

When the old common law rule forbidding wrongful death claims was dominant, the notion that pure life salvages were not compensable might have found justification in economics. If the shipowner could not be held liable for the deaths of his crew, he would receive no financial benefit from the saving of their lives. If the shipowner has not received any financial benefit from the salvage service, why should he have to pay for it? Another possible justification for the courts' refusal to allow pure life salvage awards might have been the notion that sailors would not need any monetary incentives to save the lives of fellow seamen; they would do so with or without rewards. But when modern courts deal with pure life salvages, they may be willing to allow the life salvor to recover his expenses; at least where the salvor and defendant seem to have agreed, before the life salvage was attempted, that the salvor would be compensated for his efforts.⁹³

Formerly, the damages caused by the collision of two ships would be shared equally by the owners of the two ships,⁹⁴ but if only one ship was at fault for the collision, he would have to bear all of those losses.⁹⁵ Of course, the Limitation of Liability Act would allow a

90. Lord Campbell's Act, 9 & 10 Vic. c.93 (1846).

91. *Moragne v. States Marine Lines, Inc.*, 398 U.S. 375, 90 S. Ct. 1772, 26 L. Ed. 2d 399, 1970 AMC 967 (1970) (stating that "in the United States, every State today has enacted a wrongful death statute.").

92. *Id.* (Overruling *The Harrisburg*, 119 U.S. 199, 213, 7 S. Ct. 140, 30 L. Ed. 358 (1886) and holding that "an action does lie under general maritime law for death caused by violation of maritime duties.").

93. *See Peninsular & Oriental Steam Nav. Co. v. Overseas Oil Carriers, Inc.*, 553 F.2d 830, *cert. denied*, 434 U.S. 859, 98 S. Ct. 183, n. 9 (1977).

94. *The Pennsylvania*, 86 U.S. 125 (1874) (holding that where both ships were at fault, the owners of each ship must pay half of the total damage.). However, the modern rule is that damages are apportioned between the parties to a collision based on their fault. *See Reliable Transfer v. United States*, 421 U.S. 397 (1975) (establishing the modern rule of proportional fault that is used in maritime collisions today, and *overruling The Schooner Catharine v. Dickinson*, 58 U.S. (17 How.) 170 (1885)).

95. *The Clara*, 102 U.S. 200, 26 L. Ed. 145 (1880) (holding that "where the fault is wholly on one side, the party in fault must bear his own loss, and compensate the other party, if such party have (sic) sustained any damage.").

shipowner to avoid having to pay damages to another ship if his own ship was destroyed (if it were successfully invoked.) In the 19th century, when ships and their cargo were damaged or destroyed, there was little to no long-term environmental threat. Although there could be dramatic political and economic repercussions when ships carrying large amounts of gold sank, there were no concerns about pollution. Consequently, parties who did not own ships or cargo (and who were not on either vessel) were generally not directly hurt by shipwrecks. An exception might be if another ship crashed into the wrecked ship.

But in the modern world, if an oil tanker or a vessel carrying hazardous substances crashes, it can have dire consequences not only for the shipowners, their crews, and the cargo owners; but also for other parties who rely on the waters.⁹⁶ The marine world is a major (sometimes primary) source of food for many of people, who may suffer tremendously if they are unable to fish, or eat contaminated seafood. The modern American statutes seem to suggest that Congress was aware of the far-reaching negative consequences of discharges of oils and hazardous substances into the water. Shipowners and cargo owners enter into voluntary contracts with each other, so in that context, the Limitation of Liability Act seems less draconian. But it seems much more unfair when the shipowner limits his liability against an unrelated third party, and especially when the liability is for pollution cleanup costs. Accordingly, Congress refuses to allow the Limitation of Liability Act to apply when the vessel makes a release or threatened release of "oil" or "hazardous substances."⁹⁷

Should a salvager be rewarded for successfully protecting a shipowner from this liability? Unrelated parties benefit more from the waters being (relatively) free of oil and hazardous substances, so why should the shipowner have to pay the salvager for helping these other people? The shipowner should have to pay the salvager because CERCLA and OPA 90 would have made him responsible for the cleanup costs, if they had occurred. Salvagers should not be able to recover for preserving the economic status quo of third parties (who would have been harmed by the oil or chemical spill;) rather, salvagers should be able to recover based on the liability that the shipowner would have incurred under CERCLA or OPA 90 if the salvager had not prevented the spill.

96. See *infra* Louisiana v. M/V Testbank, 752 F.2d 1019 (5th Cir. 1985).

97. See 33 U.S.C.A. §§ 2701-2761; 42 U.S.C.A. §§ 9601 - 9675.

International treaties and the contracts commonly used in salvage operations have slowly begun to provide salvagers with incentives to prevent environmental damage. However, it seems that these agreements and contracts seek to reward salvagers to encourage the socially useful behavior of preventing or minimizing damage to the environment; *not because* the recipient of the salvage services have been spared from the liability environmental statutes.

*B. International Conventions on Salvage Law and The Salvage Act*⁹⁸

Over the last hundred years, the international community seems to have begun to realize that the mechanics of the old Anglo-American salvage law do not adequately encourage salvagers to avert oil and hazardous substance spills. In the early 20th century, many important maritime nations decided to unify their salvage laws by treaty. So in 1910, they signed the Brussels Convention on the Unification of Certain Rules with Respect to Assistance and Salvage at Sea⁹⁹ ("1910 Convention"), which had been drafted by the Comité Maritime International; ("CMI") and came into effect in 1913.

The U.S. formally bound itself to its signature of the 1910 Convention in 1911, and in 1912 Congress passed what is commonly known as the Salvage Act¹⁰⁰ to make its domestic law consistent with the terms of the treaty.¹⁰¹ The international trend towards a more unified salvage law was a very important development, even though the 1910 Convention was superseded by a successor treaty.

In 1981, the CMI created a new salvage draft that was modified by the International Maritime Organization, and after considerable changes, became the International Convention on Salvage, 1989 ("1989 Convention") which was ratified by the U.S., and came into

98. Act of Aug. 1, 1912, ch. 268, 37 Stat. 242, 46 U.S.C.A. App. §§ 727-730, as amended [hereinafter *The Salvage Act*].

99. See Healy, *supra* note 36 at 746, n. 39. "The 1910 Convention entered into force Mar. 1, 1913. The official French text appears at 37 Stat. 1658, and the U.S. English text appears at 37 Stat. 1670 and as T.S. No 576. The U.S. English translation is Appendix B to M. Norris, *The Law of Salvage* (Norris), which constitutes v. 3A of Benedict on Admiralty. The U.K. English translation is Appendix 2 to G. Brice, *The Maritime Law of Salvage* (2d ed. 1993)."

100. *The Salvage Act*, *supra* note 98, 46 U.S.C.A. App. §§ 727-730, as amended.

101. See Healy, *supra* note 36 at 746-47.

force in 1996.¹⁰² This treaty now applies to essentially all salvage cases brought before American courts.¹⁰³ The 1989 Convention modifies the traditional “no cure-no pay” rule with respect to environmental salvage efforts.¹⁰⁴

Article 14 of the 1989 Convention guarantees a salvor the recovery of his expenses if he makes a failed attempt to prevent a vessel or its cargo from damaging the environment, or if his attempt fails to minimize the environmental damage. If a salvor succeeds in preventing or minimizing the environmental damage, the tribunal deciding the matter can reward him by awarding him up to twice his expenses, if this amount exceeds the compensation he would have received under Article 13.¹⁰⁵ It is important to note that an Article 14 environmental salvage award, unlike an Article 13 award, is *not limited* by the value of the salvaged property.¹⁰⁶ A hypothetical situation may help illustrate how Article 14 helps promote environmental protection.

Suppose that there is a very old, poorly maintained oil tanker, and that her captain pilots her in such a way that she ends up being wedged between two very large rock formations, and that she begins to leak her oil. Several tugboats, owned separately by independent subsidiaries of a larger company, happen to be nearby. As luck would have it, they are equipped with booms and other equipment designed to contain spilled oil. However, the tugs’ owner knows that the tanker is very old, and is probably worthless because of the damage it has just sustained. If a strict “no cure-no pay” framework were in place, the owner of the tugs would not have an economic incentive to try to contain the oil spill, assuming that the measures taken to contain the spill would also render the oil unfit for resale.

Article 14, on the other hand, enables the owner to recover his reasonable expenses, and perhaps even earn a small profit of up to 30% if he fails and up to twice his expenses if the tribunal feels it fair and just to do so in light of the Article 13 factors.¹⁰⁷ However, because

102. *Id.* See also Nicolas J.J. Gaskell, *The 1989 Salvage Convention and the Lloyd’s Open Form {LOF} Salvage Agreement 1990*, 16 Tul. Mar. L. J. 1, 77-90 (1991) (transcribing the English language version of the 1989 Salvage Convention).

103. For the exceptions, *see id.* at 748.

104. *Id.* at 747.

105. See art. 14, 1989 Convention, available at <http://www.jus.uio.no/lm/imo.salvage.convention.1989/doc.html#61>.

106. *Id.*

107. *Id.*

“expenses” only include direct expenses, and not overhead, and the opportunity cost of keeping resources at the ready when they could be earning money elsewhere,¹⁰⁸ it would probably not be economically viable to keep such vessels and their crews at the ready.

C. Background Information Regarding Lloyd's Open Forms

Most modern salvage operations happen pursuant to contracts between the salvager and the salvagee. When a vessel is faced with a maritime peril, its master is usually in a poor position to negotiate for the salvage of his ship. On the one hand, he has a duty not to agree to a contract that would waste the owner's money, but on the other hand, the vessel, her crew, and/or her cargo could all be destroyed if the salvager is not persuaded to give his assistance.

The Lloyd's Standard Form of Salvage Agreement (“Lloyd's Open Form”) is the most commonly used contract in salvage cases,¹⁰⁹ and specifies that English law (most importantly, English salvage and contract law) will govern the agreement,¹¹⁰ regardless of whether either of the contracting parties has any other connections to England, or any other part of the United Kingdom. The salvage is still considered pure salvage, as opposed to contract salvage, because these contracts do not specify a particular amount of compensation, which is left “open.”¹¹¹ Parliament has incorporated the text of the 1989 Salvage Convention into English salvage law by statute.¹¹²

Using Lloyd's Open Form has benefits for both the salvager and the salvagee. The salvager is benefited because the contract will not be vulnerable to accusations that it was made under duress, or that it will be voided for unconscionability. If the salvager requested a specific amount of compensation, his strong bargaining position could make the owner feel as though he has no choice but to accept the proposal, no matter how unfair it is. The salvagee is helped be-

108. See *infra* Semco Salvage & Marine Pte. Lt. v. Lancer Nav. Co. Ltd., (The Nagasaki Spirit), 1 Lloyd's L. Rep. 323, 1997 AMC 1989 (House of Lords, 1997).

109. Liza J. Bowman, *Oceans Apart Over Sunken Ships: Is the Underwater Cultural Heritage Convention Really Wrecking Admiralty Law?*, 42 Osgoode Hall L.J. 1, 5, n. 14 (2004) (“Lloyd's Open Form (LOF) is the most common form of salvage contract in use around the world.”).

110. See Healy *supra* note 36 at 749-50.

111. Although Lloyd's Open Form agreements are contractual in nature, they are still result in “pure” as opposed to “contract” salvages. *Id.*

112. See The Merchant Shipping (Salvage and Pollution) Act 1994, § 1(1), Acts 1994, ch. 68, adopts the 1989 Convention as Sched. 1.

cause he will not have to try to persuade a court that the contract should be voided for duress or unconscionability.

Lloyd's Open Form has been used for over a hundred years, and its terms are periodically revised by the Council of Lloyd's. The 1980 version of Lloyd's Open Form included a new and radical provision, one which abrogated the traditional Anglo-American "no cure-no pay" rule. Under this version, if a salvage attempt failed or was only partially successful, the intended beneficiary of the failed services would still have to reimburse the salvager for his reasonable expenses, and potentially have to pay an additional amount of up to 15% of those reasonable expenses.¹¹³

D. *Lloyd's Open Form 2000*¹¹⁴ and the SCOPIC Clause¹¹⁵

Lloyd's Open Form 2000 gives salvagers the ability to invoke the Special Compensation by P & I Clubs ("SCOPIC") clause, which incorporates Article 14 of the 1989 Salvage Convention into the agreement. The SCOPIC clause changes the way that the salvager's award is calculated by using a pricing schedule that specifies a certain per diem fee for the particular equipment and personnel that were involved in the salvage operation. A salvager who invokes the SCOPIC clause receives this award whether or not his salvage attempt succeeded. However, the SCOPIC "clock" only starts running once the salvager has notified the owner that he is invoking the SCOPIC clause.¹¹⁶ This encourages him to invoke the clause early, or not at all. The SCOPIC rates only apply *after* the salvager invokes the SCOPIC clause; not retroactively.

However, the tribunal calculating the SCOPIC award will also determine what the award would have been under Article 13 of the 1989 Salvage Convention. In other words, it calculates the award that the salvager would have received if he had not invoked the SCOPIC clause. If it turns out that the salvager would have received more money had he not invoked the SCOPIC clause, the tribunal will award the salvager 75% of the difference between the two figures, in addition to the SCOPIC compensation. In calculating the

113. See Healy *supra* note 36 at 747-50.

114. Lloyd's Open Form 2000, available at http://www.lloyds.com/Lloyds_Worldwide/Lloyds_Agents/Salvage_Arbitration_Branch/Lloyds_Open_Form_LOF.htm.

115. See Healy *supra* note 36 at 754-56.

116. *Id.* at 755.

difference, the tribunal will make his calculations as though the SCOPIC clause was invoked immediately, even if it was not.¹¹⁷

The SCOPIC clause allows salvagers to guarantee a certain level of compensation based on the equipment and labor they have used, and avoid the harshness of the “no cure-no pay” rule. Also, it does not eliminate the salvager’s incentive to succeed; if he does, his reward may be increased. However, if his SCOPIC award is higher than his Article 13 award would have been, he will not receive a higher award for being successful. His SCOPIC award will be supplemented by 75% of the Article 13 award, to the extent that it exceeds his SCOPIC award.¹¹⁸ Because this is somewhat complicated, an illustrative hypothetical example is in order.

1. An Illustrative Hypothetical SCOPIC Award

Let us suppose that a tugboat receives a call for help from a yacht, which has exhausted its supply of fuel and is a fair number of miles away from the nearest port. They form a Lloyd’s Open Form 2000 contract to determine what award, if any, the tugboat will receive. Also, there are reports that a nearby storm might be moving towards the stranded yacht within a few days. The tugboat starts towing the yacht, and one day later the master of the former vessel radios her owner and tells him that he is unsure as to whether the tug will have enough fuel to tow it to the nearest port. After hearing that news, the owner invokes the SCOPIC clause and tells this to the owner of the yacht, and tells the tug’s master to try anyway and hope for the best. The tug continues to work, and two days later it succeeds. Let us further suppose that the SCOPIC schedule says that the tug and her crew are owed \$40,000 per diem, that the yacht was worth \$4,000,000 and finally, that it would have been utterly destroyed if not for the salvager’s efforts.

In that hypothetical scenario, the owner of the salvage vessel would have an \$80,000 SCOPIC award; if the salvage effort had failed after the second and third days of work, he would still receive that \$80,000 award. Next, the tribunal will look at Article 13, in particular, at the factors provided in Article 13 ¶ 1(a)-(j). Let us suppose that the tribunal finds that the salvager would have been entitled to \$2.4 million under Article 13 (note that Article 13, ¶ 3 says that a salvage award may not exceed the value of the salvaged

117. *Id.*

118. *Id.*

property.) The tribunal will then subtract \$120,000 (the SCOPIC award that the salvager would have received had he invoked the SCOPIC clause at the beginning of the contract, rather than on day two) from the \$2.4 million, which leaves \$2.28 million. Next, the tribunal will multiply the \$2.28 million by 0.75 and arrive at a figure of \$1.71 million. It will then add that amount to the \$80,000 SCOPIC amount and award the salvager a total of \$1.79 million for his services.

E. *Environmental Liability Salvage in Modern Era Cases*

When *Blackwall* was decided in 1869, the Supreme Court stated that salvage awards are meant to encourage ships to come to the aid of other vessels that are unable to protect themselves.¹¹⁹ This supports the public policy of minimizing damage to property and the number of lives lost at sea. As this paper has previously discussed, shipwrecks in modern times can cause massive economic damage to those who use the waters and shores for economic purposes. To deal with this modern reality, Congress passed OPA 90 and CERCLA to make those who spill oil and hazardous substances (respectively) responsible, *inter alia*, for the costs of cleaning up the pollutants, notwithstanding the Limitation of Liability Act.¹²⁰ This section will look at how courts have responded to the question of whether environmental liability salvage should be allowed, both before and after the applicable environmental law came into effect.

1. Averted Oil Spills Pre-OPA 90 – *Allseas Maritime*¹²¹

In *Allseas Maritime, S.A. v. M/V Mimosa*, the Fifth Circuit Court of Appeals was asked to increase a salvager's award based on the liability that the salvager prevented the shipowner from incurring (in addition to the value of the property that he saved.) In 1979, the *M/V Mimosa* and the *M/V Burma Agate*¹²² collided in Galveston Bay

119. *Blackwall*, 77 U.S. at 14.

120. See 33 U.S.C.A. §§ 2701-2761; 42 U.S.C.A. §§ 9601-9675.

121. *Allseas Mar., S.A. v. M/V Mimosa*, 812 F.2d 243 (5th Cir. 1987).

122. The Fifth Circuit Court of Appeals and the United States District Court for the Southern District of Texas disagree as to the spelling of this vessel's name. The district court spells the name of this vessel "Burmah Agate," while the Fifth Circuit spells it "M/V Burma Agate." *Allseas Mar., S.A. v. M/V Mimosa*, 574 F. Supp. 844 (S.D. TX 1983), *aff'd* *Allseas Mar., S.A. v. M/V Mimosa*, 812 F.2d 243. For the sake of consistency, this paper uses the Fifth Circuit's spelling.

(thirty-five members of the *M/V Burma Agate's* thirty-nine man crew were killed, as was one member of the *M/V Mimosa's* crew).¹²³ The *M/V Burma Agate* began to leak her fuel, and the *M/V Mimosa* caught fire. The surviving members of the *M/V Mimosa's* crew dropped her anchor and abandoned ship; failing to turn off her engines, and leaving her under the control of her auto-pilot. The *M/V Mimosa* continued to travel through the water like a runaway train, dragging her anchor behind her.¹²⁴

The *Mimosa's* rudder had been turned starboard, so she was traveling in an ever-widening spiral, towards nearby oil rigs and platforms. The captain of a nearby tugboat, the *M/V Tarzoe Vizier*, took action to prevent the *M/V Mimosa* from crashing into any of the several oil rigs that were nearby. He steered his tugboat towards the burning ship and attempted to stop her by using his ropes and cables to entangle her propeller, although this risked pulling the *M/V Tarzoe Vizier* into the propeller of the much larger *M/V Mimosa*. There was also a very substantial risk that the *M/V Mimosa* (which was still aflame) could explode, which would have likely destroyed the *M/V Tarzoe Vizier* and killed or seriously injured everyone aboard her. The tugboat's crew was enveloped by the burning tanker's smoke, and at one point a lifeboat from the tanker fell onto the *M/V Tarzoe Vizier*.¹²⁵

The effort to entangle the *M/V Mimosa's* propeller failed. So, the *M/V Tarzoe Vizier* and two other tugs instead pushed the *M/V Mimosa*, altering her course so that she would not crash into the oil rigs or oil platforms. A fourth tug used her hose to help put out the *M/V Mimosa's* fire. After seven and a half hours, the *M/V Mimosa's* engines finally stopped and the crisis ended. The tugs were able to recover about \$350,000 worth of oil and prevented the *M/V Mimosa* from crashing into an oil rig, which probably would have destroyed her utterly. However, the damage caused by the collision and fire reduced the *M/V Mimosa's* value to about \$400,000. The *M/V Tarzoe Vizier* was worth about \$2.6 million.¹²⁶

Despite the heroic efforts of the *M/V Tarzoe Vizier* (and the other three tugs, which apparently did not claim any salvage awards), she could not establish that the oil she recovered belonged to the *M/V Mimosa*, and was unable to collect a salvage award from the *M/V*

123. *Allseas Mar., S.A. v. M/V Mimosa*, 812 F.2d at 245.

124. *Id.*

125. *Id.*

126. *Id.* at 245-46.

Mimosa's owners for recovering it. The Fifth Circuit also declined to increase the salvage award based on the liability averted by the *M/V Tarzoe Vizier*. The Fifth Circuit Court of Appeals acknowledged that the *M/V Tarzoe Vizier* had prevented the *M/V Mimosa* from causing millions of dollars in additional damage to any of the oil rigs that it probably would have crashed into. It also acknowledged that preventing a shipowner from incurring liabilities protects the shipowner's interests, just as protecting the shipowner's ship and/or cargo does.¹²⁷ However, the Fifth Circuit considered the effects of the Limitation of Liability Act,¹²⁸ and noted that if the *M/V Mimosa* had crashed into an oil rig, her value would have been reduced to nothing; she could have then limited her liability to that amount. Therefore, the *M/V Tarzoe Vizier* did not actually protect the *M/V Mimosa's* owners from any liability – the Limitation of Liability Act would have limited the liability to essentially nothing.¹²⁹ Accordingly, the *M/V Tarzoe Vizier* received only a \$67,500 award, for being 25% responsible for preserving the \$400,000 value of the *M/V Mimosa* post-salvage.¹³⁰

OPA 90 was not in effect when the events in *Allseas Maritime* took place, but today it is.¹³¹ If the events in *Allseas Maritime* took place post-OPA 90, the Limitation of Liability Act would make the owner of the *M/V Mimosa* liable for, *inter alia*, the cleanup costs of the oil that surely would have spilled if she had crashed into an oil rig or an oil platform. The Fifth Circuit seemed to have believed that it should allow the *M/V Tarzoe Vizier* to recover for the liability that she averted, but she *didn't* avert any liability to the owner of the *M/V Mimosa*. The Limitation of Liability Act would have capped the

127. *Id.* at 247 (holding that there was “considerable merit” to the notion “that salvors should be compensated for liability avoided.”).

128. Limitation of Liability Act, 46 U.S.C. §§ 181-196 (1851) (current version at 46 U.S.C. § 3054 (2006)).

129. Unless, of course, a second collision would have killed people on whatever structure it would have crashed into. The Limitation of Liability Act would probably consider such a crash a separate event, and make the *M/V Mimosa's* owner liable with regards to personal injuries and wrongful death claims, for up to \$420 per gross ton of the *M/V Mimosa*, as defined by the statute. See 46 U.S.C.A. 30504.

130. *Allseas Mar. S.A., v. M/V Mimosa*, 812 F.2d at 246-47.

131. The salvage in this case occurred in 1979, while OPA 90 only applies to discharges or threatened discharges of oil that occurred after August 18, 1990. See 33 U.S.C.A. §§ 2701-2761.

owner's liability to the owner of the oil rig to the value of the *M/V Mimosa*, which would have been around \$0.

How would the Fifth Circuit have responded if OPA 90 had been in effect? We cannot say for sure, although it seems that the only thing that made the court decide not to recognize liability salvage was the Limitation of Liability Act. Unfortunately, the Fifth Circuit would not decide another salvage award case until *eleven years* after *Allseas Maritime*.¹³² That case, which this paper discusses *infra*, did deal with the potential release of oil, but it was the *salvager* that was at risk of causing an oil spill (and incurring liability under OPA 90.) In the meantime, a Louisiana district court considered environmental liability salvage.

2. *Trico Marine*¹³³

In *Trico Marine*, a Louisiana district court examined *Allseas Maritime's* apparent approval of liability salvage (at least, when limitation of liability could be overcome, as through OPA 90 or CERCLA). In this case, several barges loaded with benzene were fastened together. The fastenings came loose and the flotilla broke apart; realizing the danger, the Coast Guard sent a distress call asking for help from any nearby vessels who might be able to assist in recapturing the barges. The plaintiff responded and succeeded in rounding up the barges, and averting a probable chemical spill. The salvager requested that the district court consider, in calculating his salvage award, the CERCLA liability that was averted by his actions.¹³⁴

The district court considered whether it would allow liability salvage in the case. It noted that the drafters of the 1989 Convention rejected the idea of inserting language that would have allowed liability salvage.¹³⁵ Although the 1989 Convention had been ratified by the U.S. Senate, it did not go into effect until 1997, when 15 nations had ratified it. The district court noted that the drafters of the 1989 Convention decided not to explicitly permit liability salvage;

132. See *Margate Shipping Co. v. The J.A. Orgeron (The Cherry Valley)*, 143 F.3d 976, 989, n. 14 (5th Cir. 1998).

133. *Trico Marine Operators, Inc. v. DOW Chem. Co.*, 809 F. Supp. 440 (E.D. LA 1992).

134. *Id.* at 441.

135. *Id.* at 443 (citing Nicolas J.J. Gaskell, *The 1989 Salvage Convention and the Lloyd's Open Form {LOF} Salvage Agreement 1990* 16 TUL. MAR. L. J. 1, 7 n. 16 (1991)).

they had debated putting in such a provision, but decided not to. The district court determined that their decision not to explicitly allow liability salvage was essentially the same thing as them deciding to insert a provision expressly forbidding liability salvage, and that accordingly, it would not recognize liability salvage, despite the fact that the 1989 Convention had not even come into force when the case was decided.¹³⁶ The court's conclusion does not seem warranted. If the drafters intended to forbid liability salvage, they would have specified this in the 1989 Convention. The lack of any reference to liability salvage one way or the other actually seems to suggest that among the drafters, the proponents and opponents of liability salvage were relatively divided on the issue, and perhaps they compromised by leaving it for the courts to decide.

The court decided that because both the 1989 Convention and Lloyd's Open Form 1990 had "rejected" liability salvage, it would not follow the *Allseas Maritime* dicta that suggested that liability salvage would have been appropriate when limitation of liability was not possible.¹³⁷ The *Trico Marine* court decided to add the Article 14 "skill and efforts of the salvors in preventing or minimizing damage to the environment" consideration to the list of traditional *Blackwall* factors. It indicated that it preferred that result because it would mean that it would not have to try to estimate the amount of liability that had actually been avoided.¹³⁸ The issue of estimating the averted liability is dealt with *infra*, in Section III of this note.

3. *The Cherry Valley*¹³⁹

In *The Cherry Valley*, the Fifth Circuit Court of Appeals again dealt with the issue of potential environmental liability in salvage operations, but this time in a very different context from *Allseas Maritime*. The *Orgeron* was a tug that was towing the *Poseidon*, which had a tall hanger specially designed to store an external fuel tank for NASA; the tank had a replacement cost of about \$31 million, and would have taken about three years to replace. NASA had

136. *Trico Marine*, 809 F. Supp. 440, 443 (holding that "[i]n light of the rejection of liability salvage ... the Court will add an additional factor to the *Blackwall* list - "skill and efforts of the salvors in preventing or minimizing damage to the environment.").

137. *Id.*

138. *Id.* at 443-444.

139. *The Cherry Valley*, 143 F.3d 976.

three other tanks of the same kind, but had determined that it preferred to have at least four tanks on hand.¹⁴⁰ The *Orgeron* was bringing the tank from Michoud, Louisiana to the Kennedy Space Center at Cape Canaveral, Florida. Tropical Storm Gordon started approaching the *Orgeron*, but when her captain asked her owner for permission to seek refuge, he was told to press onward. She lost engine power about 10 to 18 miles from the shores of Florida and requested help from the Coast Guard, which was unable to help due to the storm.¹⁴¹

The *Cherry Valley*, an oil tanker carrying about 9 million gallons of crude oil at the time, arrived and decided to try to help. She maneuvered close to the *Orgeron* and tried to send the tug messenger lines. The purpose of sending the messenger lines was to facilitate the attachment of towing cables, which would allow the *Cherry Valley*, the oil tanker, to tow the tug to safety.¹⁴² After two failed attempts to pass messenger lines, the *Cherry Valley* successfully passed hawsers to the *Orgeron*, which was still attached to the *Poseidon*. The *Cherry Valley* passed over the tow line between the *Orgeron* and the *Poseidon*, but fortunately the tow line did not entangle the *Cherry Valley*'s rudder or propeller.¹⁴³ While these maneuvers were taking place, the *Orgeron* was drifting into waters that were too shallow for the *Cherry Valley* to float on; there were only about 10 feet between the *Cherry Valley*'s keel and the bottom. Fortunately, the *Cherry Valley* successfully recovered the *Orgeron* and the *Poseidon*, without destroying or severely damaging herself in the process, or spilling any of her oil.¹⁴⁴

When the district court was determining the amount of the salvage award, it applied the *Blackwall* factors, one of which looks at the risk taken by the salvager. The district court noted that the *Cherry Valley* took a big risk; not only were lives and the very expensive ship at stake, but millions of gallons of crude oil could have been spilled if

140. Presumably, NASA preferred to have more than two backup external fuel tanks. This seems prudent; there are no "do-overs" in rocketry.

141. *Id.* at 980.

142. Of course, it is quite atypical for an oil tanker to tow a tugboat. It is many times more common for tugs to tow oil tankers.

143. Coincidentally, the *M/V Tarzoe Vizier* in *Allseas Maritime* attempted to stop the *M/V Mimosa* by entangling her propeller with towing lines. In both *Allseas Maritime* and *The Cherry Valley*, tugs' towing lines almost entangled the tankers' propellers. *Allseas Mar., S.A. v. M/V Mimosa*, 812 F.2d at 245; *The Cherry Valley*, 143 F.3d at 981.

144. *The Cherry Valley*, 143 F.3d at 982.

she had crashed. The Fifth Circuit Court of Appeals agreed that the *Cherry Valley* was indeed risking more than just herself and her crew; it held that the risk of environmental liability was “properly counted” under that factor.¹⁴⁵

The Fifth Circuit Court of Appeals held that the district court did not abuse its discretion when, in looking at the *Blackwall* factors, it took into account the salvager’s risk of being exposed to environmental (OPA 90, in this case) liability. It noted that “in this context, there is no principled reason to distinguish between the costs imposed by the risk of injury or death, and those costs imposed by the risk of negligence liability or strict environmental damage liability. All are actual costs to the salvor, and he would presumably be unwilling to perform the salvage service without their recompense.”¹⁴⁶

This holding by the Fifth Circuit indicates that it still strongly believes that averted environmental cleanup liabilities (as well as other averted liabilities) are relevant in salvage awards.¹⁴⁷ In this case, though, it was the salvager that was at risk of spilling crude oil. One of the *Blackwall* factors is the risk that the salvager undertook during the salvage operation. The owner of the *Cherry Valley* risked not only the loss of her ship, cargo, and crew, but also the chance that he would incur liability under OPA 90. The Fifth Circuit rightly held that district courts can consider averted environmental liabilities under the traditional *Blackwall* analysis; if salvage law is to encourage salvaging, it has to take into account the real considerations weighed by those involved, including the risk of incurring environmental liabilities.

F. Other Recent Developments in Environmental Liability Salvage

1. *The Nagasaki Spirit*¹⁴⁸

In this case, the House of Lords examined the SCOPIC provision in Lloyd’s Open Form 2000 contracts. Article 14 of the 1989 Con-

145. *Id.* at 988.

146. *Id.*

147. *See id.* (determining that “in this context, there is no principled reason to distinguish between the costs imposed by the risk of injury or death, and those costs imposed by the risk of negligence liability or strict environmental damage liability. All are actual costs to the salvor, and he would presumably be unwilling to perform the salvage service without their recompense.”).

148. *Semco Salvage & Marine Pte. Lt. v. Lancer Nav. Co., (The Nagasaki Spirit)*, [1997] 1 Lloyd’s L. Rep. 323 (H.L.), 1997 AMC 1989.

vention is important to these contracts, because if the SCOPIC provision is invoked, that article is read into the contract.¹⁴⁹ Article 14 stipulates that, within the context of the Article, a salvor's "expenses" include his reasonable out-of-pocket expenses as well as "a 'fair rate' for equipment and personnel actually and reasonably used in the salvage operation, taking into consideration the criteria set out in art. 13, para. 1(h), (i) and (j)."¹⁵⁰ Lord Mustill, writing for the House of Lords, considered whether the term "fair rate" was meant: to compensate the salvager for his indirect and overhead expenses; or a rate that also gives the salvager a substantial profit to reward him and encourage others to prevent or minimize environmental damage.¹⁵¹

Lord Mustill felt that the words of the 1989 Convention made it clear that the term "fair rate" in Article 14 was not meant to give salvagers profits. The phrase "fair rate for equipment and personnel" is considered part of the Article's definition of the "salvor's expenses."¹⁵² It would seem to do violence to the language of Article 14 to interpret *expenses* to include a salvor's "expenses *and a profit incentive*." Rather, the phrase "fair rate for equipment and personnel" seems to contemplate that the salvager is meant to recover his direct expenses, as well as his overhead expenses. It seems that Lord Mustill's interpretation of this phrase in the 1989 Convention was quite right, but unfortunately, under this interpretation salvagers will essentially "break even" because they will only be recovering their expenses, roughly. Article 14 is not meant to encourage environmental salvage; it merely seeks to stop discouraging it, as Article 13 would when the imperiled vessel has little to no value.

Although Article 14 doesn't allow a profit element in its "fair rate," Lloyd's Open Form 2000's tariff rates do offer salvagers a chance to earn a profit.¹⁵³ However, these profits scale with the rates on its schedule of rates, *not* with the liability averted. This means that preventing \$100 million in oil spill liabilities will probably result in a far lower salvage award than the salvager would generally get for saving \$100 million in property, since the award will

149. See Healy, *supra* note 36 at 754-56.

150. See art. 14, International Convention on Salvage (1989), available at <http://www.jus.uio.no/lm/imo.salvage.convention.1989/doc.html#61>.

151. *The Nagasaki Spirit*, 1 Lloyd's L. Rep. 323.

152. *Id.*

153. Healy, *supra* note 36, at 754.

be based on the resources used by the salvager, as opposed to the economic value of his salvaging activity.

While it is a step in the right direction, Lloyd's Open Form 2000 simply doesn't do enough to encourage salvagers to keep vessels properly equipped at the ready to respond to environmental emergencies. And neither does Article 14, which only allows the salvager to recover based on the people and property he uses *during the salvage operation*¹⁵⁴ – it does compensate him for keeping salvage ships constantly at the ready, because it doesn't take into account the professional salvager's downtime. It is important for the law to encourage professional salvagers, because they will tend to be better equipped and trained to respond to crises than random passers-by.

2. Conclusion Regarding Environmental Liability Salvage

The 1989 Convention and Lloyd's Open Form 2000 both evidence the growing international understanding that the ancient salvage rules of the past need to be changed somewhat if they are to encourage the protection of our marine and coastal resources. The Fifth Circuit Court of Appeals came close to recognizing environmental liability salvage in its 1987 *Allseas Maritime* decision,¹⁵⁵ but the Limitation of Liability Act prevented it from formally reaching the question. When the Fifth Circuit decided its next salvage award case, *The Cherry Valley*, it reaffirmed the notion that salvage awards should consider not just the property that could have been destroyed, but also the liability that could have been created.¹⁵⁶

As the Fifth Circuit pointed out in *The Cherry Valley, Blackwall* (which was decided in 1869) is the most recent time that the Supreme Court weighed in on the factors that courts should look to

154. See *The Nagasaki Spirit*, 1 Lloyd's L. Rep. 323.

155. *Allseas Maritime*, 812 F.2d at 247 (stating that "there is considerable merit, nonetheless, in the position that salvors should be compensated for liability avoided. Whether the salvor protects a shipowner's vessel or his other assets, the economic benefits are equally valuable.").

156. *The Cherry Valley*, 143 F.3d at 988 (stating that "[i]n this context, there is no principled reason to distinguish between the costs imposed by the risk of injury or death, and those costs imposed by the risk of negligence liability or strict environmental damage liability. All are actual costs to the salvor, and he would presumably be unwilling to perform the salvage service without their recompense. For this reason, the risk of environmental liability was properly counted under the rubric of the fourth factor.").

when computing salvage awards.¹⁵⁷ Despite its age, *Blackwall's* dicta about the purpose of salvage law seem to support the notion that the law should motivate salvagers by rewarding them for protecting others and their property.¹⁵⁸

When wooden sailing ships, and even when the coal-powered steamships sank, the long-term environmental damage caused was quite generally insignificant. Consequently, the main economic interests threatened by collisions and other causes of damage to ships and their cargo were of the shipowners and the cargo-owners. The Limitation of Liability Act was, in effect, a law that was designed to subsidize shipowners and shipbuilders at the expense of cargo owners,¹⁵⁹ so that more Americans would invest in new ships.¹⁶⁰

In a world where the Limitation of Liability Act could apply to essentially any liability relating to a shipowner's ship, the *Blackwall* factors took into account all of the real financial considerations; the shipowner generally wouldn't be liable for more than the value of his ship, so the appropriate salvage award would virtually always be lower than that amount. But because Congress specified that the liabilities arising out of OPA 90 and CERCLA actions are not subject to the Limitation of Liability Act,¹⁶¹ there is no reason to arbitrarily limit a salvager's award by the value of the property he recovers – not when he has caused that property's owner to avoid enormous liability under one of those statutes.

When an oil tanker is at risk of spilling her cargo, the “real” risk to the owner is *not* that his tanker will be damaged or destroyed. The owner, if he has any sense at all, is much more concerned about being hit by a tidal wave of OPA 90 liability. The Limitation of Liability Act will not be able to help him,¹⁶² and insurance policies don't

157. *Id.* at 983, n. 8. (pointing out that *Blackwall* “contains the most recent bit of guidance that the Supreme Court has deigned to give on the subject of the calculation of salvage awards.”).

158. *Blackwall* at 14 (stating that “[p]ublic policy encourages the hardy and adventurous mariner to engage in these laborious and sometimes dangerous enterprises, and with a view to withdraw from him every temptation to embezzlement and dishonesty, the law allows him, in case he is successful, a liberal compensation.”).

159. *See generally*, Sweeney, *supra* note 24.

160. *See id.* at 259-60 (quoting Senators Dickinson (Dem., N.Y.) and Rantoul (Dem. Mass.), Cong. Globe, 31st Cong. 2d Sess. 322 at 716-17 (1851)).

161. *See supra* at notes 51 and 71.

162. *See id.*

provide unlimited coverage.¹⁶³ If the law will reward a prospective salvager only for helping to preserve the value of the oil tanker, it is, in effect, asking him to risk life, limb, and fortune to protect the owner from the potential OPA 90 liability for nothing. *Blackwall* clearly stated that the law does not expect a would-be salvager to protect another solely out of the goodness of his heart; it promises him a “liberal compensation” for doing what is right.¹⁶⁴ In the 19th century, the courts did not hesitate to award salvagers liberal compensation for saving cargo from the seas. In the 21st century, they should also award them liberal compensation for saving the seas from cargo.

IV. METHODS FOR CALCULATING AN ENVIRONMENTAL SALVAGE AWARD

Courts have struggled in their efforts to define the scope of the damages that can be attributed to an oil or chemical spill. In *Louisiana v. M/V Testbank*,¹⁶⁵ the Fifth Circuit had to decide the extent to which the economic costs of a chemical spill would have to be borne by the responsible party. The events giving rise to the case happened in the Mississippi River Gulf outlet, where a bulk carrier, the *M/V Sea Daniel*, and a container ship, the *M/V Testbank* collided. Several of the *Testbank*'s containers fell overboard, spilling their contents, about 24,000 pounds of pentachlorophenol, (“PCP”) into the water. The authorities suspended navigation in the outlet for almost three weeks, and fishing, shrimping and related activities were also suspended in 400 square miles of surrounding marsh and waterways.¹⁶⁶

M/V Testbank brings to light the difficulties in line-drawing that often arise in cases where the defendant has done a massive amount of damage. Of course, in that case, the court was dealing with the question of which injured parties should be allowed to recover, as

163. And even if the insurance policy is “only” for a few tens or hundreds of millions of dollars, the insurer is virtually certain to argue that the policy doesn't apply in the particular circumstances of the spill. It can take years of litigation for the insured to collect on the policy, if he ever does. The insured may end up feeling compelled to settle for considerably less than the coverage amount he expected when he bought the policy.

164. *Blackwall*, 77 U.S. at 14.

165. *Louisiana v. M/V Testbank*, 752 F.2d 1019 (5th Cir. 1985).

166. *Id.*

opposed to what the cleanup costs are or would have been. But at least in that case, the court had the benefit of being able to look at actual claims of damage brought by real plaintiffs. If a court tried to calculate the amount of liability for cleanup costs that a salvager averted, its calculations would be extremely speculative. If the spill hasn't happened, how would we know what the cleanup costs would have been? The following subsections will examine several possible ways to deal with the critical problem of setting the proper salvage award.

A. Hear Expert Testimony on the Amount of Averted Liability

One potential solution would be to treat this as any other question of fact. Juries and courts are frequently asked to estimate, for example, the amount of medical expenses that an asbestos plaintiff is likely to incur over the rest of his life. Is it much different to ask courts to determine what the salvage defendant would have had to pay to clean up the oil or chemical spill, if it had happened?

When courts have to determine a successful plaintiff's future medical expenses that he will have to pay as a result of the tort against him, each side can hire expert witnesses (generally physicians) to testify as to what those future medical expenses will be. As required under *Daubert v. Merrell Dow Pharm, Inc.*, a (federal) district court "must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable."¹⁶⁷ This helps to minimize the chances that the finder of fact (particularly if it is a jury; though in salvage cases there would not be a jury), will be influenced by irrelevant and/or unreliable scientific testimony or evidence which they might otherwise tend to believe, as scientists and doctors are highly respected and trusted by many Americans. Of course, during cross-examination, each side can challenge the other's witness. The cross-examination process can reveal flaws in an expert's testimony and undermine its credibility.

But when one is trying to estimate environmental cleanup costs, it doesn't seem as though one could obtain very reliable scientific evidence or testimony in most instances. Both parties would probably try to introduce the testimony of hydrodynamicists; the plaintiff salvager's expert would likely testify that a large percentage of the tanker's oil would have spilled, while the defendant's expert would

167. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589, 113 S. Ct. 2786, 2795 (1993).

probably testify that the spill would have been much smaller. In this type of situation, it would probably be very difficult to determine whether the testimony is reliable. Large oil spills occur relatively infrequently, and the oil spills probably tend to spread significantly before scientists would have been able to study how and why it spread the way it did. In contrast to medical evidence or testimony, where there are often many well-researched studies, predicting the extent of a hypothetical oil spill would involve a lot of speculation; probably enough to make the testimony unreliable. And while doctors may be able to give rough estimates of a plaintiff's probable future medical expenses, estimating the cleanup costs of an oil spill is an entirely different matter.

If one looked at the cleanup costs of prior oil spills and adjusted them upwards for inflation, that still wouldn't be likely to provide a reliable estimate of the expenses. Even if the past oil spill was of the same amount of oil, the cleanup costs would not necessarily be at all comparable. Firstly, there are many different types of oil, each with a different weight, composition etc. Different kinds of oil do not necessarily spread at the same speed; heavier oils tend not to spread as quickly, and may sink under the water, while lighter oils tend to float on the water's surface and spread over large areas. Also, one would have to take into account how far the oil spill was from those with the capabilities to clean it. An oil spill near a remote archipelago would probably require very significant logistical expenses, but an oil spill very close to cleaning equipment would be much cheaper in that regard. Also, new technologies can drastically affect the costs of cleaning oil. If a significant new technology did not exist when the prior oil spill occurred, then the costs of cleaning that oil spill might have been much more expensive or possibly cheaper back then. The cleanup costs could have been more expensive in the past if a newer, cheaper, and more efficient technology were developed since then to fight oil spills. Or oil spills could have been less expensive to clean in the past, if the new technology minimizes environmental damage, but is much more expensive to use or produce.

Yet another complicating factor would be the fact that not all beaches are equally difficult to clean. Coarse sand, grainy sand, and fine sand are not equally difficult to clean oil from. Also, for example, the effects of the tides in the *Amoco Cadiz* oil spill probably influenced how much of the oil contaminated the beaches of Brittany as opposed to the water. If the tides and/or currents and/or wind had moved more of the spilled oil onto the beaches, it might have been much more expensive to clean the oil (assuming that it is more ex-

pensive to clean oil from beaches than from the water.) Thus, all of these concerns suggest that district courts would not be well-suited to estimate the cleanup costs of averted spills.

B. Fixed Amount per Unit of Chemical / Oil

If a statute specified that the owner of the vessel that caused the spill is liable for \$100 per barrel of oil spilled, the district court would only have to determine how many barrels would have been spilled if the salvager had not intervened. The court would not need to hear evidence as to how much the oil would have cost to clean up, only evidence as to how much oil would have spilled. This would require far less speculation from the experts; the maximum amount would have been the per unit rate multiplied by the total amount of oil or chemicals that could have spilled. But this would still leave many significant problems unsolved.

Although there are collision experts who can look at a damaged ship and make educated guesses as to exactly how that damage occurred, their predictions as to how much oil or chemical would have spilled would probably be based more on speculation than on scientific principles. And unfortunately, all of the concerns about estimating the quantity of oil spilled that were discussed *supra* would still leave the district court with little to no reliable evidence on which to make his decision. Thus, this option also seems unsatisfactory.

C. Base Liability Upon Vessel's Characteristics

A better solution might be to consider the characteristics of the vessel in question. Congress did something similar to this when it established liability caps for OPA 90 liability.¹⁶⁸ Congress could assign a presumptive cleanup liability amount per gross ton of a tanker. To reflect the reduced risk of oil spills that is associated with double-hulled ships, Congress could establish a lower per gross ton multiplier for such tankers. And this multiplier could itself be multiplied by how full the tanker was – if it was carrying a half-load of crude oil, the per gross ton multiplier might be halved as well. Tankers that were overloaded (filled beyond the amount that they were designed to transport safely), might have a higher multiplier. For example, 2% higher per gross ton if the tanker was carrying 2% more oil than the tanker was designed to safely accommodate.

168. See 42 U.S.C.A. § 9607(c); 33 U.S.C.A. § 2704(a).

Then, the court would have a relatively easy-to-calculate value to work with. It could then apply the traditional *Blackwall*-like¹⁶⁹ analysis of Article 13 of the 1989 Convention and apportion the value of the liability prevented according to the same principals that are used to share the value of salvaged property between their owner and their salvor. If the Article 13 factors militate in favor of a small salvage award, the court could simply award the salvager a small portion of this liability averted. This solution would be much easier to implement than creating an entire federal agency, or a special department within an existing agency, to estimate the cleanup costs that the salvager has rendered unnecessary, as has been suggested by at least one scholar.¹⁷⁰

There would be a few problems with this solution, however. Firstly, it would require Congress to take action, or a new salvage convention. Unfortunately, we might have to wait for more preventable oil or chemical spills to happen before Congressional interest would be sufficiently piqued to make passing such a law a priority. Also, the setting of the "per gross ton" dollar amounts would be fraught with controversy. All things considered, however, this proposal appears to strike a very good balance between making the award reasonably easy for courts to calculate, and making the award have a good connection to reality. For example, assigning a lower multiplier for double-hulled ships would reflect their general tendency to spill less oil than their single-hulled cousins. It would also allow the courts to continue to use the *Blackwall* doctrine, which is something with which they are probably comfortable. And most importantly, it would provide the proper financial incentives to encourage salvagers to prevent catastrophic oil and chemical spills.

169. *Blackwall*, 77 U.S. at 14.

170. Note, *Calculating and Allocating Salvage Liability*, 99 Harv. L. Rev. 1896, 1915, 1916 (1986).