



# Oil Pollution Act Liability Limits in 2022

Report to Congress  
*September 15, 2023*



**U.S. Coast Guard**

# Foreword

September 15, 2023

I am pleased to present the following report, “Oil Pollution Act Liability Limits in 2022,” prepared by the U.S. Coast Guard.

The Coast Guard and Maritime Transportation Act of 2006 directs the submission of an analysis of the extent to which oil discharges from vessels and non-vessel sources have, or are likely to result in, removal costs and damages for which no defense to liability exists and that exceed the established liability limits.

Pursuant to congressional requirements, this report is provided to the following Members of Congress:

The Honorable Maria Cantwell  
Chair, Senate Committee on Commerce, Science, and Transportation

The Honorable Ted Cruz  
Ranking Member, Senate Committee on Commerce, Science, and Transportation

The Honorable Sam Graves  
Chairman, House Committee on Transportation and Infrastructure

The Honorable Rick Larsen  
Ranking Member, House Committee on Transportation and Infrastructure.

I would be pleased to answer any questions you may have, or your staff may contact my Senate Liaison Office at (202) 224-2913 or House Liaison Office at (202) 225-4775.

Sincerely,



Linda L. Fagan  
Admiral, U.S. Coast Guard  
Commandant





# Oil Pollution Act Liability Limits in 2022

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# I. Legislative Language

This report responds to the language set forth in section 603(c) of the *Coast Guard and Maritime Transportation Act of 2006* (Pub. L. 109-241), as amended by section 601(b) of the *Coast Guard Authorization Act of 2016* (Pub. L. 114-120), which states:

## **SEC. 603. LIMITS ON LIABILITY.**

### (c) REPORT.—

(1) Initial Report. – Not later than 45 days after the date of enactment of this Act, the Secretary of the department in which the Coast Guard is operating shall submit a report on liability limits described in paragraph (2) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives.

(2) Contents. – The report shall include, at a minimum, the following:

(A) An analysis of the extent to which oil discharges from vessels and nonvessel sources have or are likely to result in removal costs and damages (as defined in section 1001 of the Oil Pollution Act of 1990 (33 U.S.C. § 2701)) for which no defense to liability exists under section 1003 of such Act and that exceed the liability limits established in section 1004 of such Act, as amended by this section.

(B) An analysis of the impacts that claims against the Oil Spill Liability Trust Fund for amounts exceeding such liability limits will have on the Fund.

(C) Based on analyses under this paragraph and taking into account other factors impacting the Fund, recommendations on whether the liability limits need to be adjusted in order to prevent the principal of the Fund from declining to levels that are likely to be insufficient to cover expected claims.

(3) Annual Updates. – The Secretary shall provide an update of the report to the Committees referred to in paragraph (1) not later than January 30 of the year following each year in which occurs an oil discharge from a vessel or nonvessel source that results or is likely to result in removal costs and damages (as those terms are defined in section 1001 of the Oil Pollution Act of 1990 (33 U.S.C. § 2701)) that exceed liability limits established under section 1004 of the Oil Pollution Act of 1990 (33 U.S.C. § 2704).

## II. Background

The *Oil Pollution Act of 1990* (OPA) was enacted in the wake of the T/V *Exxon Valdez* oil spill to promote measures for prevention of oil spills on navigable waters, adjoining shorelines, and the exclusive economic zone. It provides a robust federal response to spills, increases polluter liability (Responsible Parties (RPs)) for such spills, and provides for compensation to third parties who incurred removal costs and damages as a result of these spills.

The OPA provides that RPs are strictly liable for removal costs and damages resulting from a discharge up to statutory liability limits. In general, RPs are liable without limit for discharge resulting from gross negligence, willful misconduct, or a violation of operation, safety, or construction regulations (OPA § 1004 (33 U.S.C. § 2704)).

In 1986, Congress established within the Treasury of the United States, the Oil Spill Liability Trust Fund (the Fund);<sup>1</sup> however, it was not until after the 1989 *Exxon Valdez* oil spill that, under the OPA, Congress transferred monies into the Fund and authorized its use. The National Pollution Funds Center (NPFC) was created and delegated authority by the Commandant, via re-delegations of authority vested in the Secretary of the department in which the Coast Guard was operating at the time, to manage the Fund. The Fund plays a critical role in the OPA regime. It pays federal costs for oil removal when a discharge occurs and reimburses third-party claims for uncompensated removal costs and damages when a RP does not pay or is not identified.

The types of damages compensable under the OPA include damages to natural resources, loss of subsistence use of natural resources, damages to real or personal property, loss of profits or earning capacity, loss of government revenues, and increased cost of public services. In addition, the Fund is an important source of annual appropriations to various federal agencies responsible for administering and enforcing a wide range of oil pollution prevention and response programs addressed in the OPA (OPA § 1012 (33 U.S.C. § 2712)).

Specific to this report, the Fund is available, as provided by the OPA, to pay claims for removal costs and damages resulting from an oil discharge that exceeds a RP's liability limits. This includes payment of claims from RPs who pay or incur removal costs or damages more than their liability limits and can establish their entitlement to the limits under the circumstances of the discharge (OPA § 1008 (33 U.S.C. § 2708)).

Claims to the Fund are payable only from the Fund, and payments are limited by the available balance. For any single discharge incident, the Fund is authorized to pay no more than \$1 billion, of which no more than \$500 million may be paid for natural resource damages (OPA § 9001(c) (26 U.S.C. § 9509)).

Pursuant to section 603 of the *Coast Guard and Maritime Transportation Act of 2006*, liability limits for vessel discharges were substantially increased. In that same section, Congress requested this analysis and report.

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<sup>1</sup> Omnibus Budget Reconciliation Act of 1986 (Pub. L. 99-509)

### III. Analysis of Discharges

This section provides an analysis of the extent to which oil discharges from non-vessel and vessel sources have resulted, or are likely to result, in removal costs and damages, as defined in the OPA, that exceed liability limits established in the OPA, as amended by the *Coast Guard and Maritime Transportation Act of 2006*.<sup>2</sup>

#### A. Non-vessel Sources

When the liability limits under the OPA apply, RPs for an offshore facility will be liable for all removal costs plus up to \$137.7 million for damages with respect to each incident.<sup>3</sup> The OPA mandates that the liability limit be increased periodically to reflect increases in the Consumer Price Index. After the May 1, 2022 data analysis snapshot for this report, the U.S. Department of the Interior's (DOI) Bureau of Ocean Energy Management adjusted the limit of liability on April 14, 2023, from the \$137.7 million set in 2018 to \$167.8 million, which is the maximum increase that may be implemented absent new legislation.<sup>4 5</sup>

The incident involving the DEEPWATER HORIZON drilling rig and its Macondo Prospect well (DEEPWATER HORIZON incident) in the Gulf of Mexico, which began in April 2010, was an unprecedented environmental disaster that resulted in billions of dollars in damages, far exceeding the statutory liability limit for an offshore facility. In response to this incident, on May 12, 2010, the Obama Administration proposed raising the limitation of liability for all RPs, including those responsible for offshore facilities.<sup>6</sup> BP, one of DEEPWATER HORIZON's RPs, estimated that the cost of the incident totaled \$65 billion.

In addition to the DEEPWATER HORIZON incident, in 2004, an oil leak from a TAYLOR ENERGY oil platform commenced, with oil collection efforts commencing in 2019 and still ongoing. On March 17, 2022, the U.S. Department of Justice announced completion of a settlement agreement with TAYLOR ENERGY. TAYLOR ENERGY will transfer \$432 million to the U.S. Department of the Interior Bureau of Ocean Energy Management to plug remaining seafloor oil wells. TAYLOR ENERGY will also pay \$12.8 million to the U.S. Coast Guard to reimburse past costs, \$15 million to a Clean Water Act civil penalty, and \$16.5 million to Natural Resource Damages to help compensate the public for losses to natural resources caused by the spill.

As the background data for all offshore incidents since the enactment of the OPA show, the DEEPWATER HORIZON and TAYLOR ENERGY incidents are not typical of historical offshore facility incidents, although they have resulted in significant costs, far exceeding the current statutory limits.

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<sup>2</sup> The cut off date for the data used in the analysis for this report is May 1, 2022.

<sup>3</sup> The limit of liability for offshore facilities stated here is the value occurring on May 1, 2022, which is the cutoff date for this report's analysis.

<sup>4</sup> See 88 Fed. Reg. 22910 (April 14, 2023).

<sup>5</sup> DOI's 2023 adjustment to the limit of liability for offshore facilities will be reflected in the analysis of offshore facilities in next year's report update.

<sup>6</sup> See 33 U.S.C. § 2701(32)(C).

With respect to offshore facility incidents (other than the incidents involving the DEEPWATER HORIZON incident and the TAYLOR ENERGY incident), the best available data indicate that there have been 60 incidents since enactment of the OPA resulting in removal costs and damages (6 Mobile Offshore Drilling Units and 54 Offshore Platforms).<sup>7</sup> Figure 1 shows the frequency of these incidents by year and facility type.

**Figure 1: Number of Offshore Facility Incidents by Year and Facility Type (Excludes 2010 DEEPWATER HORIZON and TAYLOR ENERGY Oil Spills)**

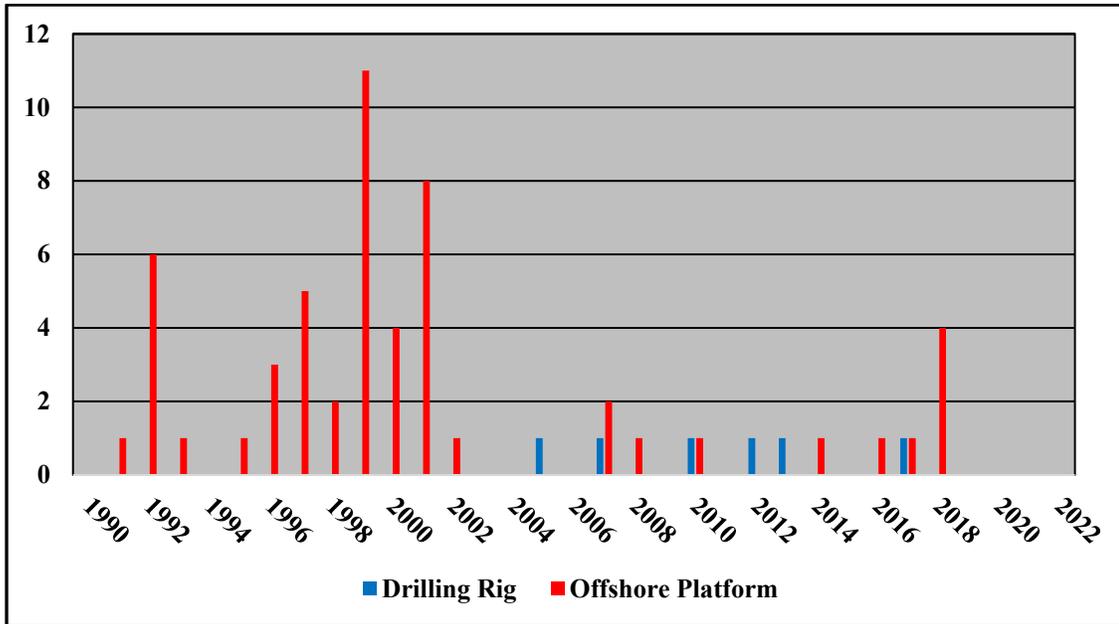
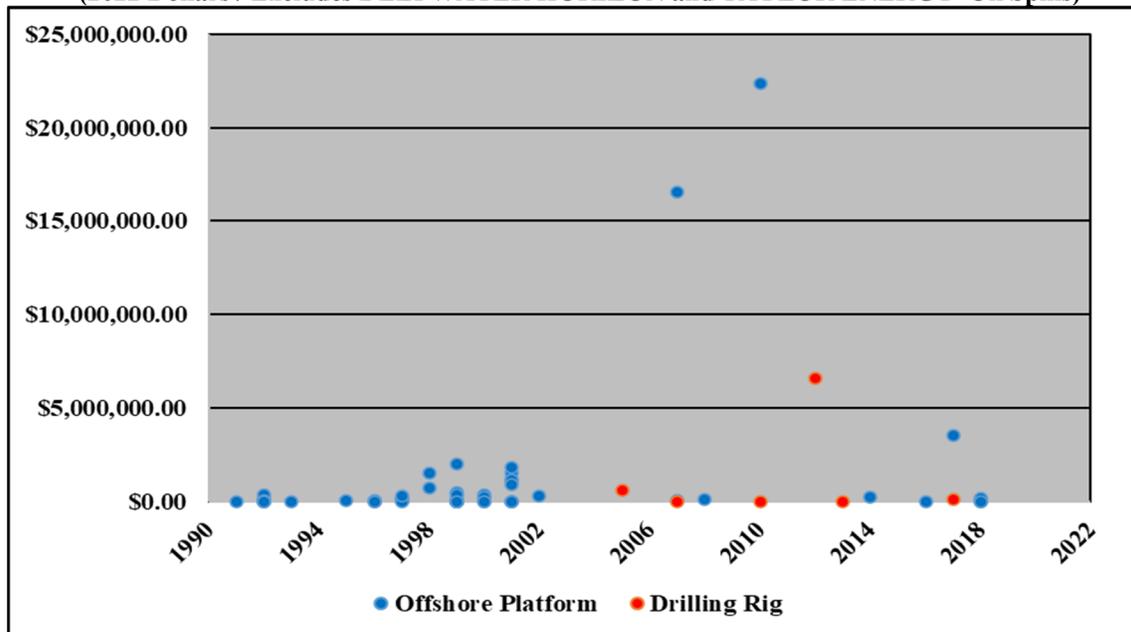


Figure 2 shows total incident costs for each incident.

**Figure 2: Total Incident Cost of Offshore Facility Incidents by Facility Type (2022 Dollars / Excludes DEEPWATER HORIZON and TAYLOR ENERGY Oil Spills)**



<sup>7</sup> These numbers do not include the DEEPWATER HORIZON incident nor the TAYLOR ENERGY incident, as these incidents are catastrophic incidents not typical of historical offshore facility incidents.

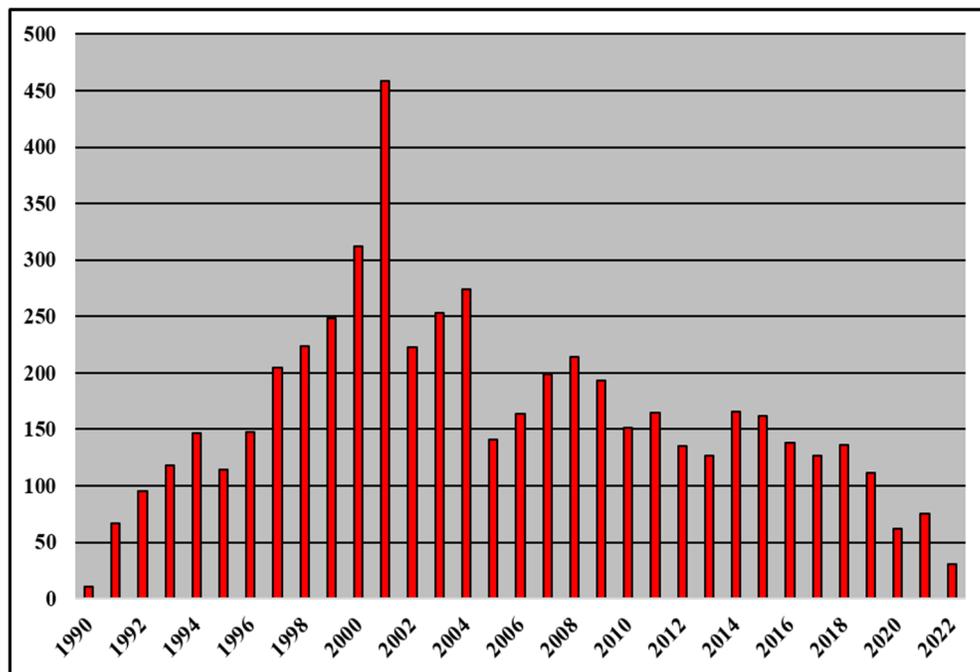
DOI is recommending Congress increase the liability limit so that RPs are assured of paying a greater share of potential economic damages to injured parties in case of a very large offshore oil spill. Increasing the liability limit is consistent with the recommendations of the National Commission on the BP Deepwater Horizon Oil Spill in their January 2011 report to the President.<sup>8</sup> A higher offshore facility limit will increase the incentives for companies to operate safely and more fully incorporate liability into their deepwater drilling decisions. DOI and the Coast Guard look forward to working with Congress to identify appropriate increased limits.

For incidents involving discharges from onshore facilities, the OPA limit of liability is \$672,514,900 per incident, inclusive of both removal costs and damages.<sup>9</sup> The 2010 ENBRIDGE ENERGY PARTNERS LAKEHEAD LINE 6B pipeline oil spill in Michigan is the sole onshore facility incident that reportedly resulted in removal costs and damages that exceed the onshore facility liability limit.

ENBRIDGE ENERGY PARTNERS reported costs of \$1.2 billion resulting from its pipeline spill. As the background data for all onshore facility incidents since the enactment of the OPA show, the ENBRIDGE ENERGY PARTNERS LAKEHEAD LINE 6B discharge is a catastrophic incident not typical of historical onshore facility incidents. There are no other onshore facility incidents that approach the \$672,514,900 limit under existing law.

With respect to onshore facility incidents (other than the incident involving the ENBRIDGE pipeline), best available data indicate there were 5,395 incidents since the enactment of the OPA. Figure 3 shows the frequency of these incidents by year.

**Figure 3: Number of Onshore Facility Incidents by Year  
(Excludes 2010 ENBRIDGE Pipeline Oil Spill)**

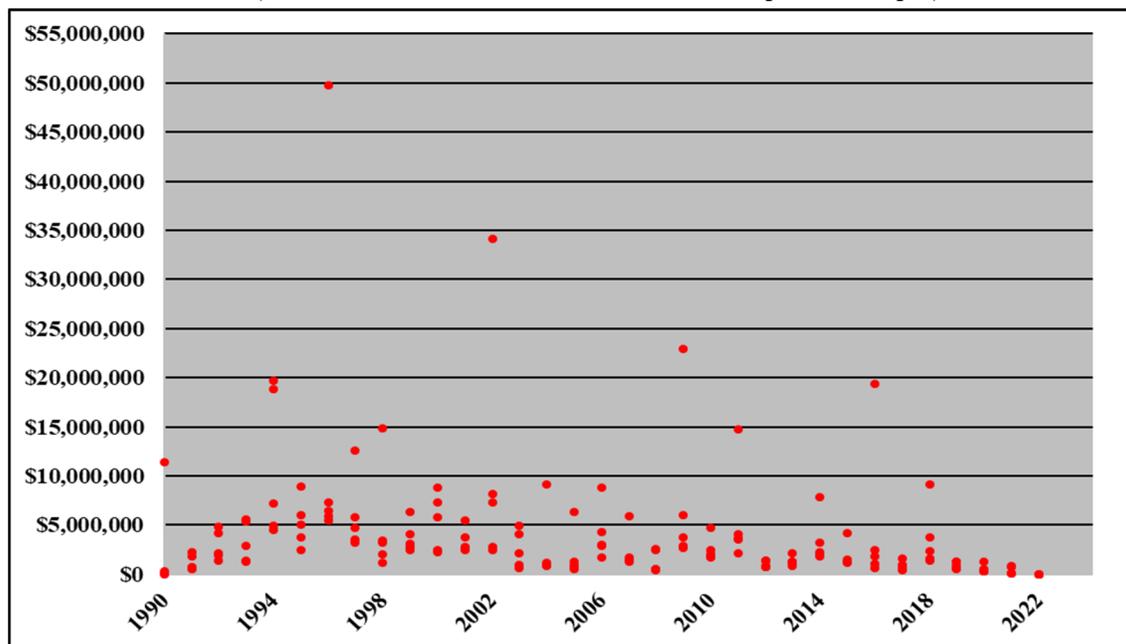


<sup>8</sup> United States. National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. (2011). Deep water: the Gulf oil disaster and the future of offshore drilling: report to the President. [Washington, D.C.]: National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling.

<sup>9</sup> 33 U.S.C. § 2704 (a)(4) and 33 C.F.R. § 138.230. The onshore facility limit of liability is subject to adjustment by regulatory action to reflect significant increases in the Consumer Price Index under 33 U.S.C. § 2704(d)(4) and may also be adjusted for risk under 33 U.S.C. § 2704(d)(1).

Figure 4 shows total incident cost of the five most expensive onshore facility incidents per year. As depicted, the highest cost incident, at approximately \$49.7 million (in 2022 dollars), does not meet the statutory \$672,514,900 limit of liability.

**Figure 4: Total Incident Cost of the Five Most Expensive Onshore Facility Incidents per Year (2022 Dollars / Excludes 2010 ENBRIDGE Pipeline Oil Spill)**



## B. Vessel Sources

After adjusting for inflation, the OPA provides the following liability limits for vessels, inclusive of both removal costs and damages:<sup>10</sup>

- (1) For a single-hull tank vessel greater than 3,000 gross tons, the greater of \$3,700 per gross ton or \$27,422,200.
- (2) For a tank vessel greater than 3,000 gross tons, other than a single-hull tank vessel, the greater of \$2,300 per gross ton or \$19,943,400.
- (3) For a single-hull vessel less than or equal to 3,000 gross tons, the greater of \$3,700 per gross ton or \$7,478,800.
- (4) For a tank vessel less than or equal to 3,000 gross tons, other than a single-hull tank vessel, the greater of \$2,300 per gross ton or \$4,985,900.
- (5) For any other vessel, the greater of \$1,200 per gross ton or \$997,000.

The best available data indicate 90 oil discharges from vessels resulted in removal costs and damages exceeding amended liability limits. The data were updated to incorporate new incidents and reflect revised estimates of costs and damages associated with previously reported incidents.<sup>11,12</sup> Discharge incidents are listed by vessel type in Appendix A and by incident date in Appendix B.

<sup>10</sup> 33 C.F.R. § 138.230.

<sup>11</sup> References throughout this report to data for the year 2022 are partial year data ending on May 1, 2022.

<sup>12</sup> We note that, under 46 U.S.C. § 3703a, it is illegal to operate “single hull” tank vessels in U.S. waters, with the exception of those vessels described under 46 U.S.C. § 3703a(b)(4), as of January 1, 2015. The OPA, however, still specifies limits of liability for these vessels. Therefore, we continue to discuss the single hull tank vessel limits of liability in this report.

Figure 5 depicts the number of such discharges per year. The elevated total for 1999 is the result of a hurricane in American Samoa, resulting in oil discharges from eight damaged fishing vessels. The figure illustrates the variance in numbers of incidents from year to year.

**Figure 5: Number of Incidents Exceeding Limits of Liability**

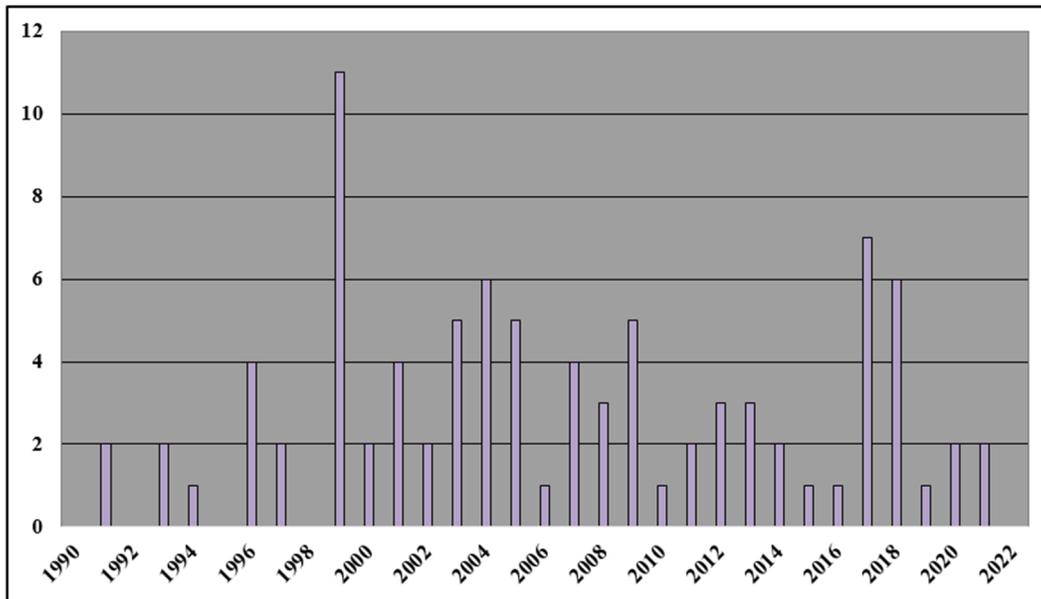
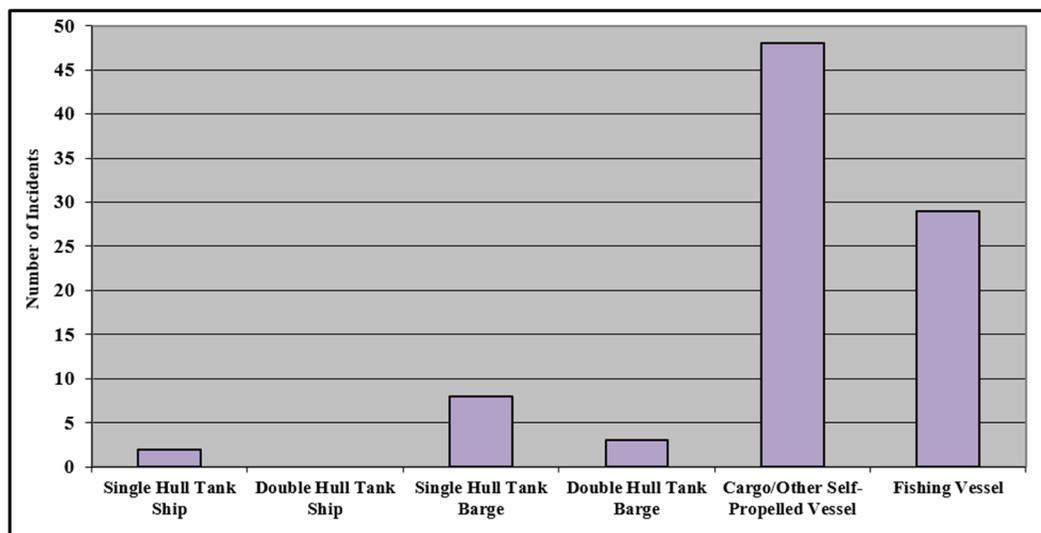


Figure 6 shows a breakdown of these 90 incidents by vessel type. Fishing vessels account for 32.2 percent of historic incidents resulting in damages in excess of the liability limits, while cargo and other self-propelled non-tank vessels represent 53.3 percent of incidents. Single hull and double hull tank barges represent 8.9 percent and 3.3 percent, respectively. Single hull tank ships account for only 2.2 percent of such discharges.<sup>13</sup> There are no double hull tank ship incidents among the 90 incidents.

**Figure 6: Number of Incidents Exceeding Limits of Liability by Vessel Type**

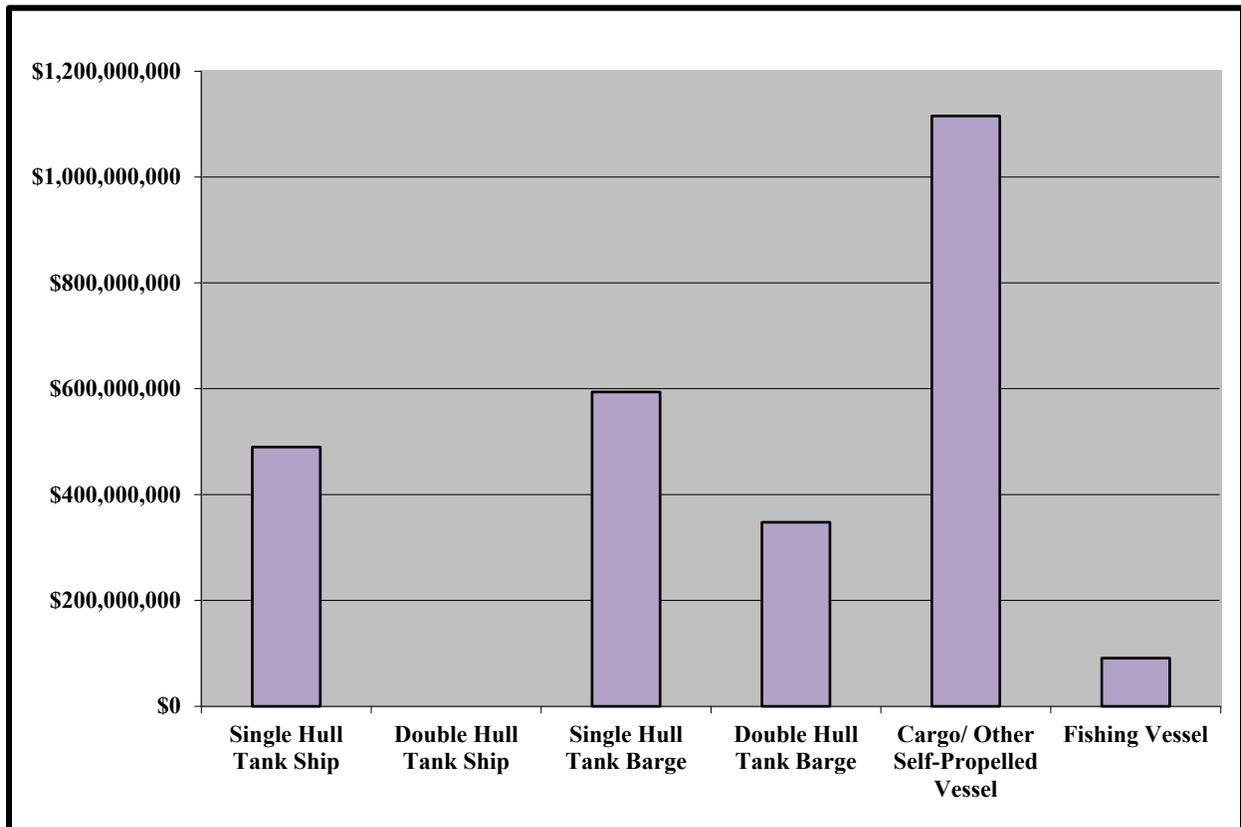


<sup>13</sup> Percentages do not add up to 100% due to rounding.

Figure 7 shows total removal costs and damages from these incidents by vessel type. Total costs in excess of liability limits for cargo/other self-propelled vessel (SPV) discharges were the highest. Total costs for single hull tank ship and tank barge discharges that exceed liability limits were also significant. Per discharge costs from single hull tank ship incidents are the highest (approximately \$244.9 million) considering the quantities of oil these vessels carry. Per discharge costs for all tank barges are also substantial (approximately \$85.6 million). Larger cargo vessels also carry enough fuel to result in costly discharges (approximately \$23.2 million per incident). The small size and limited quantities of oil characteristic of most fishing vessel incidents generally account for lower total costs of such discharges (approximately \$3.1 million), shown here and in more detail in Appendix A.

Total removal costs and damages for these discharges since enactment of the OPA is approximately \$2.6 billion.

**Figure 7: Total Incident Costs by Vessel Type**



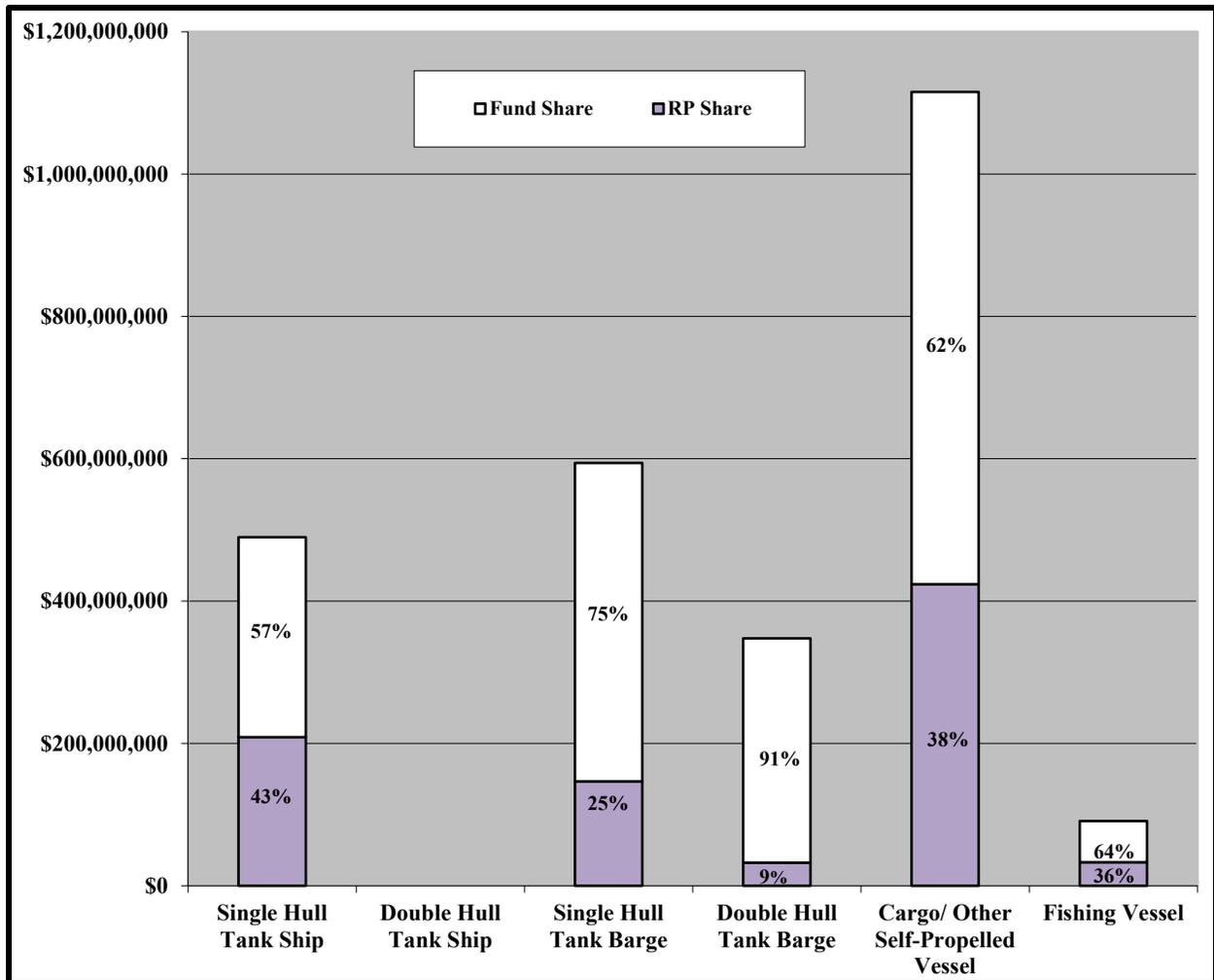
## IV. Impacts on the Fund

*This section provides an analysis of the impacts on the Fund resulting from claims against the Fund for vessel incidents in which costs and damages exceed liability limits.<sup>14</sup>*

### A. Historical Impact

As indicated in Figure 8, the Fund's financial obligation in cases where removal costs and damages exceed liability limits (listed in Appendix A) is substantial despite liability limit amendments. The top portion of the bar for each vessel type represents the Fund's share of the risk (exceeding applicable liability limit). The bottom portion of the bar for each vessel type represents RP risk (RP liability limit based on gross tonnage or minimum limit as applicable for each discharge).

**Figure 8: RP vs. Fund Share of Total Incident Costs under Current Limits by Vessel Type**



<sup>14</sup> As discussed above, historically, with the exception of the DEEPWATER HORIZON incident and ENBRIDGE data points, only vessel incidents had total incident costs that exceeded limits of liability. Therefore, facilities are not included in the discussion of RP and Fund risk cost sharing.

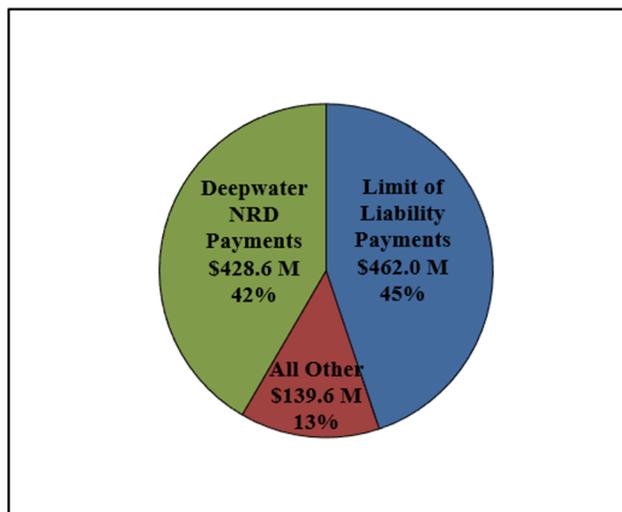
Of the approximately \$2.6 billion in estimated removal costs and damages from these incidents over the last 31 years, the Fund’s share of costs totals approximately \$1.8 billion (68 percent). This amount represents a maximum potential impact on Fund risk resulting solely from application of liability limit levels. While the rate of such incidents is difficult to predict and may vary widely from year-to-year (as indicated by Figure 5), risk to the Fund is expressed broadly as an annual cost of approximately \$57.9 million (total costs of \$1.8 billion over 31 years) in excess of amended limits in 2022 dollars.

## B. Impact from Claims

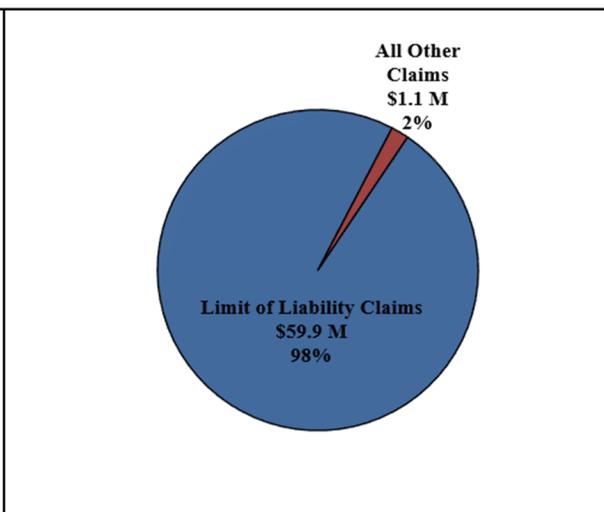
Over the past 31 years, the NPFC paid over \$1 billion to claimants in connection with OPA incidents. Of this total, \$462.0 million (or 45 percent) was paid in respect to circumstances where removal costs and damages exceeded applicable liability limit amounts (Figure 9). These “limit of liability” payments include those made directly to RPs for removal costs and damages they paid or incurred in excess of liability limits, as well as third-party claims paid by the Fund because the RP spent up to its limit of liability.

Figure 10 shows that of the \$61.0 million in claims under adjudication as of May 1, 2022, \$59.9 million (or 98 percent of the total dollars) are pending claims by RPs who incurred incident costs exceeding their liability limits or claims by third parties where incident costs exceeded the liability limits.

**Figure 9: Total Claims Paid**



**Figure 10: Total Pending Claims**

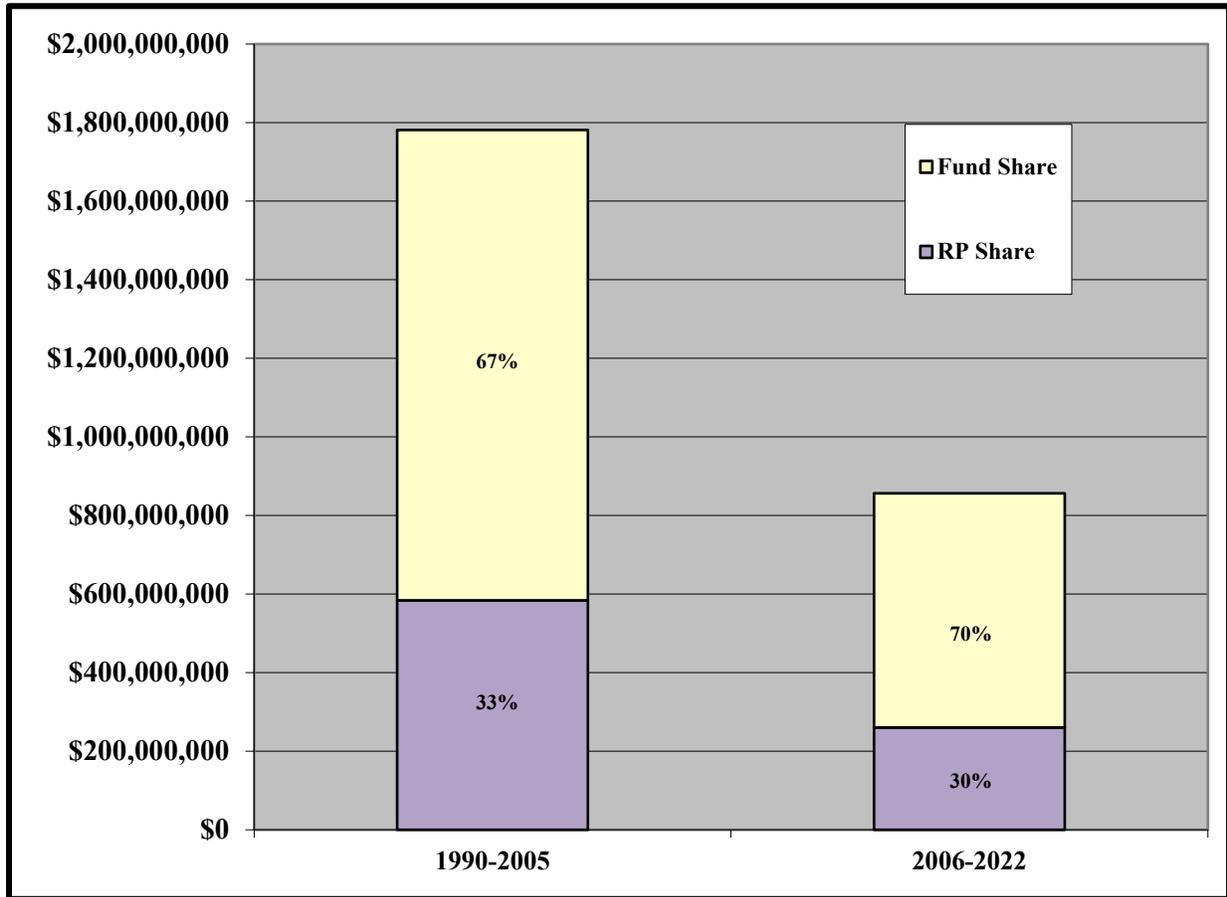


## C. Recent Trends

Potential Fund impacts resulting from payments to RPs, third parties for claims, and response costs where vessel incident costs exceeded the RPs’ limits of liability vary substantially from year to year, but averaged approximately \$57.9 million per year over the past 31 years. While the potential impact is significant, it is also useful to note that the available data show a continued trend for disproportionate Fund risk as compared to what the RP pays toward the cost of the incident.

As illustrated in Figure 11 and Appendix B, the Fund share of the risk for discharges that result in estimated removal costs and claims that exceed liability limits has consistently exceeded 60 percent of total incident costs.

**Figure 11: RP vs. Fund Share of Total Incident Costs**



The nine cent per barrel tax on oil that is an important revenue source for the Fund was reinstated by the Consolidated Appropriations Act, 2021 (Pub. L. 116-260), which amended 26 U.S.C. § 4611 (f) and extended the Fund tax until December 31, 2025. Based on current revenue and expenditure projections, the NPFC forecasts that the Fund should maintain liquidity beyond 2028 (see Figure 12).

Changing energy trends may also impact Fund costs. Though the ENBRIDGE ENERGY PARTNERS LAKEHEAD LINE 6B pipeline incident is an outlier within the historic data set, the oil spilled—diluted bitumen—is known to sink in water, raising response costs. Similarly, challenges of responding to an Arctic oil spill, from either a vessel or non-vessel source, are also likely to incur higher Fund costs. Costs associated with preparedness, response mobilization, natural resource assessment, and recovery are often higher in extreme cold climates.

## V. Findings with Respect to Further Liability Limit Adjustments

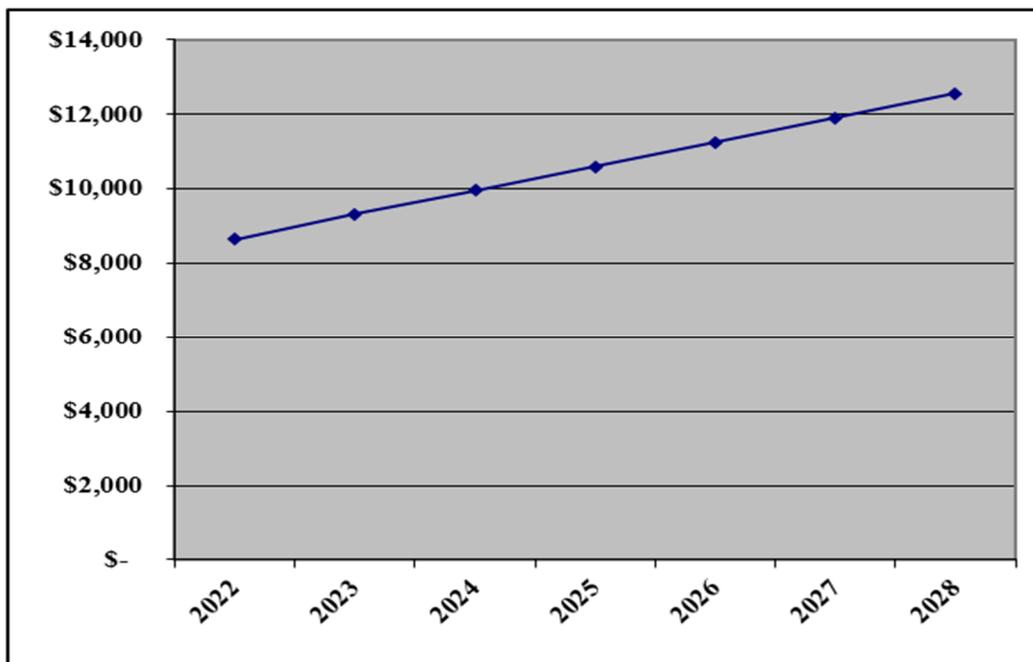
*This section discusses findings, based on historical trends and analyses, and taking into account other factors impacting the Fund, on whether the liability limits need to be adjusted in order to prevent the principal of the Fund from declining to levels that are likely to be insufficient to cover expected claims.*

### A. Future Year Fund Outlook

The NPFC anticipates the Fund will cover its projected non-catastrophic liabilities, including claims, without further increases to liability limits.

Figure 12 projects the end of year balance of the Fund through 2028 based on estimated revenues and expenditures (no adjustment for inflation):

**Figure 12: Fund Forecast Balance (Millions of Dollars)**



Notably, several classes of Fund expenditures are independent of revisions to the limits of liability, such as federal removal costs and annual appropriations. The Fund provides resources to the federal government to respond to oil discharges (federal removal costs) and to compensate claimants for their removal costs and damages when a RP cannot be identified, does not respond, or does not compensate claimants. *See* OPA § 1012(a)(1), (4) (33 U.S.C. § 2712(a)(1), (4)). The Fund also pays when recourse against RPs is not available, such as when a RP declares bankruptcy or cannot be identified.

Fund revenues are generally independent of revisions to the limits of liability. The primary source of revenue is an excise tax on oil. Revenue also includes interest earned on Treasury Securities held by the Fund, successful cost recoveries, and fines and penalties. The Fund Forecast follows Office of Management and Budget guidance and uses Treasury's Office of Tax

Analysis excise tax projections and semi-annual Economic Assumptions for Trust Fund interest rates. Cost recovery and fines/penalty revenue follow historical data patterns and are much less predictable over time.

Congress annually appropriates resources from the Fund to various agencies responsible for administering and enforcing the OPA and provisions of the *Federal Water Pollution Control Act* (see OPA § 1012(a)(5) (33 U.S.C. § 2712(a)(5))). Administrative and enforcement costs that are not allocable to a specific oil discharge are not recoverable from liable RPs.

Figure 13 shows total Fund expenses in recent years for agency appropriations, federal removal costs, and claims for removal costs and damages, of which claims resulting from incident-related costs exceeding the limits of liability is a subset.

**Figure 13: Total Fund Expenditures (Thousands of Dollars)**

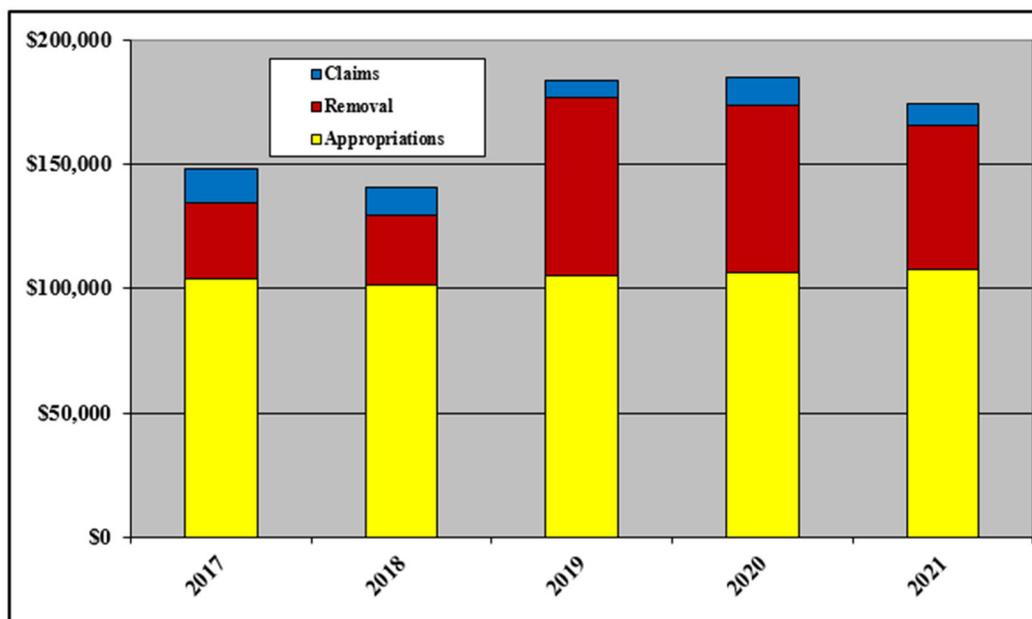


Figure 13 illustrates that from 2017 through 2021, federal removal costs and claims payments for which RPs may be liable represented only a portion of annual expenditures from the Fund. This graph displays all costs for vessel or facility discharges. Roughly half of the removal costs in Figure 13 are for onshore and offshore facility discharges.

With respect to the Fund expenses for removal costs and claims allocable to vessel spills, the Fund frequently pays when an RP is unknown. In these cases, liability limits have no impact on Fund risk. Vessel and facility liability limits will affect the Fund only to the extent RPs are available and can pay.

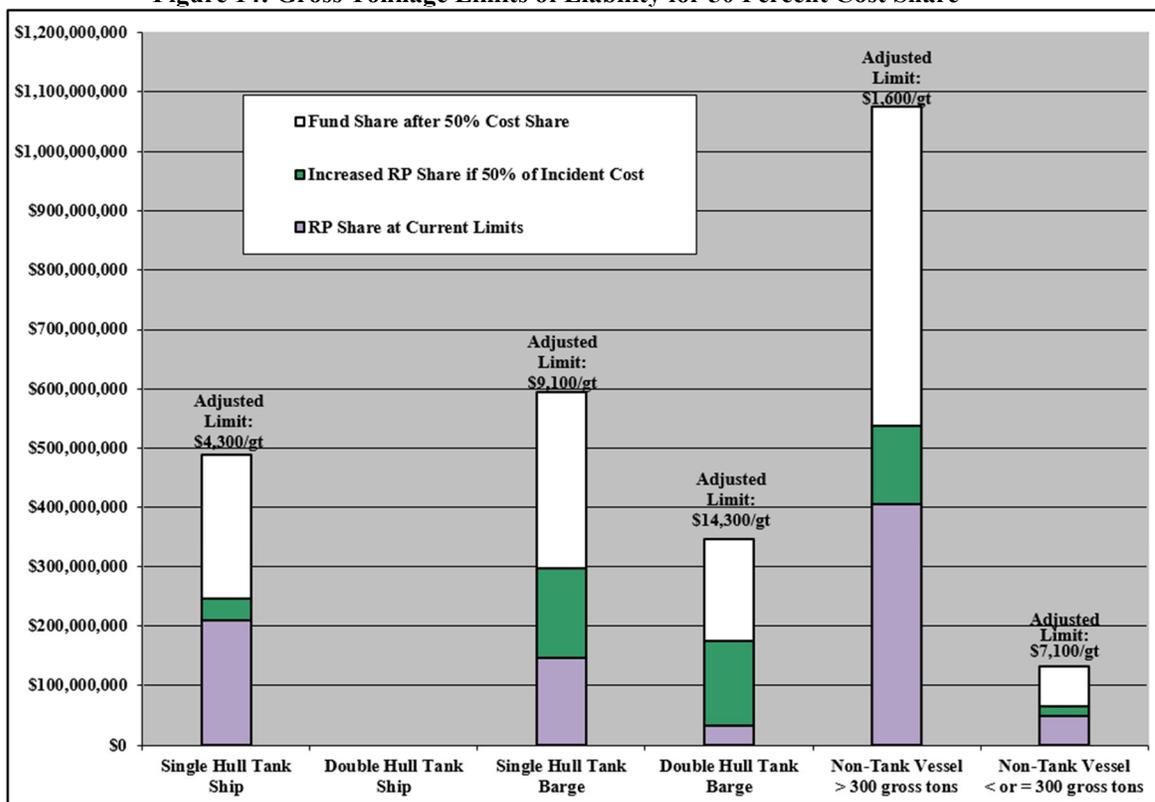
## **B. Further Liability Limit Adjustments**

Adjustments to liability limits help more equitably divide liabilities between the Fund and RPs. The OPA is founded on the “polluter pays” principle. At the same time, the OPA may limit a polluter’s liability to pay for clean-up of spills. As previously noted, on May 12, 2010, the Obama Administration proposed raising the limitation on liability for all RPs, including RPs for activities other than offshore drilling activities (such as shipping). The occurrence of the DEEPWATER HORIZON and TAYLOR ENERGY incidents show the possibility of low probability but high consequence offshore facility incidents that have the potential to exceed the

current limit of liability. The DOI and Coast Guard will work with Congress to determine if, and to what extent, increases to this limit are required to ensure that RPs pay the appropriate portion of incident costs. This analysis also indicates establishing different liability limits for non-tank vessels, including fishing, cargo, and other SPVs, by tonnage (*i.e.*, greater than 300 gross tons and less than or equal to 300 gross tons) would provide more equitable limits on smaller vessels.

Figure 8 demonstrates that for vessel discharges where removal costs and damages exceed current liability limits, the Fund bears most of the cost even if every RP is available and pays to its limit. Figure 14 illustrates how further adjustments to limits of liability per gross ton might achieve an equal sharing of that risk between RPs and the Fund. The bottom portion of the bar represents the RP risk at the current limits of liability based on gross tonnage or minimum limits as applicable for each discharge. The middle portion represents additional costs RPs would pay if additional limits were applied, which would leave the Fund covering 50 percent of total incident costs (the top portion of each bar).

**Figure 14: Gross Tonnage Limits of Liability for 50 Percent Cost Share**



For example, to split the estimated clean-up costs evenly between the Fund and vessel operators, liability limits for single hull tank ships would increase to \$4,300 per gross ton, single hull tank barges to \$9,100 per gross ton, double hull tank barges to \$14,300 per gross ton, non-tank vessels greater than 300 gross tons to \$1,600 per gross ton, and non-tank vessels less than or equal to 300 gross tons to \$7,100 per gross ton.

Figure 15 indicates the minimum amount a RP is expected to pay for an incident (based on average historical costs of incidents by vessel type in 2022 dollars) if the limits of liability were adjusted so that costs were shared evenly between the RP and the Fund.

**Figure 15: Minimum Liability Limits for 50 Percent Cost Share**

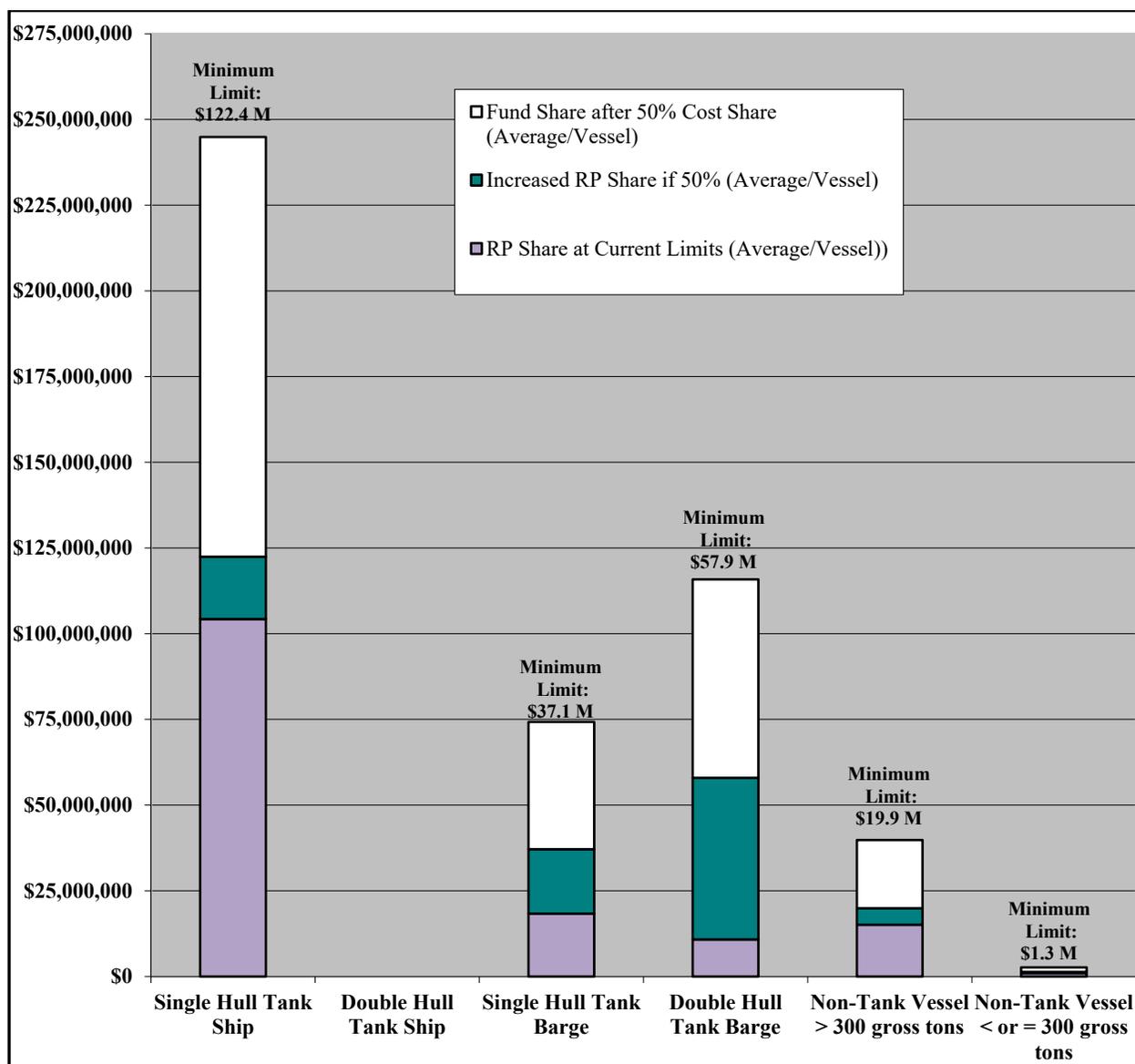


Figure 16 summarizes the 50 percent cost share limits and minimums and compares them to the current limits. Appendix C illustrates how these limits would protect the Fund from paying most of the total incident cost when applied to the 90 incidents discussed earlier. The current limits distinguish between single hull tank vessels, double hull tank vessels, and non-tank (other) vessels. As discussed in Section II, however, analysis suggests subdividing these categories as follows: categories of Tank Ship and Tank Barge are addressed separately as subsets of single and double hull Tank Vessel, and the Non-Tank Vessel category is divided between vessels greater than 300 gross tons and vessels less than or equal to 300 gross tons.<sup>15</sup>

<sup>15</sup> The comparative results for single and double hull tank barges may appear incongruous at first glance. While double hull vessels may be safer and less likely to spill oil, the data show that a catastrophic discharge from a double hull tank barge can be just as expensive as one from a single hull tank barge.

**Figure 16: Limits of Liability under the OPA**

If the vessel is a . . .		The limits of liability are the greater of:	But to achieve an equal cost share, limits of liability would need to be increased to:
Tank Ship	With a single hull, double sides only, or double bottom only	Greater than 3,000 gross tons: \$3,700 per gross ton or \$27,422,200 Less than or equal to 3,000 gross tons: \$3,700 per gross ton or \$7,478,800	\$4,300 per gross ton or \$122.4 million
	With a double hull	Greater than 3,000 gross tons: \$2,300 per gross ton or \$19,943,400 Less than or equal to 3,000 gross tons: \$2,300 per gross ton or \$4,985,900	No data <sup>16</sup>
Tank Barge	With a single hull, double sides only, or double bottom only	Greater than 3,000 gross tons: \$3,700 per gross ton or \$27,422,200 Less than or equal to 3,000 gross tons: \$3,700 per gross ton or \$7,478,800	\$9,100 per gross ton or \$37.1 million
	With a double hull	Greater than 3,000 gross tons: \$2,300 per gross ton or \$19,943,400 Less than or equal to 3,000 gross tons: \$2,300 per gross ton or \$4,985,900	\$14,300 per gross ton or \$57.9 million
Non-Tank Vessel	Greater than 300 gross tons	\$1,200 per gross ton or \$997,100	\$1,600 per gross ton or \$19.9 million
	Less than or equal to 300 gross tons	\$1,200 per gross ton or \$997,100	\$7,100 per gross ton or \$1.3 million

<sup>16</sup> There have been no historical double hull tank ship incidents that have met criteria for inclusion in this report.

*This listing includes all incidents regardless of vessel size or type and regardless of whether a claim to the Fund by a RP for amounts in excess of liability limits was received or is anticipated. Costs include federal removal costs and claims paid that have been verified. Other costs are estimated from best available information but cannot otherwise be verified. Fund exposure amounts are estimated and do not imply that the RPs will be able to limit their liability under the statute where the issue has not yet been determined.*

# Appendix A: Incidents Exceeding Liability Limits by Vessel Type

## Vessel Type: Tank Ship (Single Hull)

Vessel Name	Incident Year	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
T/V JULIE N	1996	ME	18,500	\$52,601,200	1.87	\$98,364,000	\$68,365,000	\$29,999,000	\$28,376,000
T/V ATHOS I	2004	NJ	37,900	\$252,502,200	1.55	\$391,378,000	\$140,212,000	\$251,167,000	\$210,557,000
<b>Total</b>						<b>\$489,743,000</b>	<b>\$208,576,000</b>	<b>\$281,166,000</b>	<b>\$238,933,000</b>

## Vessel Type: Tank Barge (Single Hull)

T/B VISTABELLA	1991	PR	1,100	\$5,740,000	2.16	\$12,398,000	\$7,479,000	\$4,920,000	\$4,782,000
T/B (TAMPA BAY COLLISION)	1993	FL	9,300	\$68,900,000	2.03	\$139,867,000	\$34,269,000	\$105,598,000	\$2,397,000
T/B MORRIS J. BERMAN	1994	PR	5,400	\$95,488,300	1.98	\$189,067,000	\$27,422,000	\$161,645,000	\$95,488,000
M/V SCANDIA & T/B NORTH CAPE	1996	RI	5,500	\$49,000,000	1.87	\$91,630,000	\$27,422,000	\$64,208,000	\$9,046,000
T/B BUFFALO #292	1996	TX	1,500	\$15,864,400	1.87	\$29,666,000	\$7,479,000	\$22,188,000	\$16,810,000
T/B B NO. 120	2003	MA	6,900	\$59,261,100	1.59	\$94,225,000	\$27,422,000	\$66,803,000	\$1,753,000
T/B EMC 423	2005	IL	1,400	\$10,188,600	1.50	\$15,283,000	\$7,479,000	\$7,804,000	\$10,189,000
BOSTON 30	2012	NY	1,600	\$17,167,900	1.27	\$21,803,000	\$7,479,000	\$14,324,000	\$8,818,000
<b>Total</b>						<b>\$593,940,000</b>	<b>\$146,451,000</b>	<b>\$447,489,000</b>	<b>\$149,283,000</b>

## Vessel Type: Tank Barge (Double Hull)

T/B DBL 152	2005	LA	9,700	\$51,556,200	1.50	\$77,334,000	\$22,404,000	\$54,930,000	\$24,621,000
T/B DM932	2008	LA	800	\$104,460,700	1.35	\$141,022,000	\$4,986,000	\$136,036,000	\$23,406,000
KIRBY 27706	2014	TX	1,600	\$105,069,500	1.23	\$129,235,000	\$4,986,000	\$124,250,000	\$5,090,000
<b>Total</b>						<b>\$347,592,000</b>	<b>\$32,376,000</b>	<b>\$315,216,000</b>	<b>\$53,117,000</b>

## Vessel Type: Fishing Vessel

F/V TENYO MARU	1991	WA	4,200	\$6,062,900	2.16	\$13,096,000	\$5,000,000	\$8,095,000	\$6,063,000
F/V JIN SHIANG FA	1993	AS	400	\$2,013,000	2.03	\$4,086,000	\$997,000	\$3,089,000	\$2,420,000
F/V YU TE NO. 1	1999	AS	200	\$1,164,600	1.76	\$2,050,000	\$997,000	\$1,053,000	\$5,296,000
F/V AMIGA NO. 5	1999	AS	200	\$3,355,700	1.76	\$5,906,000	\$997,000	\$4,909,000	\$2,766,000
F/V KWANG MYONG	1999	AS	200	\$1,554,800	1.76	\$2,736,000	\$997,000	\$1,739,000	\$965,000
F/V KORAM NO. 3	1999	AS	200	\$1,403,100	1.76	\$2,469,000	\$997,000	\$1,472,000	\$813,000
F/V KWANG MYONG NO 72	1999	AS	200	\$2,182,900	1.76	\$3,842,000	\$997,000	\$2,845,000	\$1,593,000
F/V KWANG MYONG NO 58	1999	AS	200	\$1,557,600	1.76	\$2,741,000	\$997,000	\$1,744,000	\$967,000
F/V KORAM NO 1	1999	AS	200	\$1,378,400	1.76	\$2,426,000	\$997,000	\$1,429,000	\$788,000
F/V KWANG MYONG NO 51	1999	AS	200	\$1,249,200	1.76	\$2,199,000	\$997,000	\$1,201,000	\$659,000
F/V JESSICA ANN	2000	ME	200	\$947,000	1.70	\$1,610,000	\$997,000	\$613,000	\$947,000
F/V SWORDMAN I	2000	HI	100	\$1,528,600	1.70	\$2,599,000	\$997,000	\$1,602,000	\$1,529,000
F/V WINDY BAY	2001	AK	400	\$3,396,400	1.64	\$5,570,000	\$997,000	\$4,573,000	\$3,396,000
F/V VANGUARD	2001	AK	200	\$699,800	1.64	\$1,148,000	\$997,000	\$151,000	\$700,000
F/V GENEI MARU #7	2002	AK	100	\$869,800	1.63	\$1,418,000	\$997,000	\$421,000	\$870,000
F/V TERESA LYNN	2002	FL	200	\$690,800	1.63	\$1,126,000	\$997,000	\$129,000	\$691,000
F/V NEW HORIZON	2004	CA	100	\$805,300	1.55	\$1,248,000	\$997,000	\$251,000	\$305,000
F/V MWALIL SAAT	2004	GU	200	\$3,413,500	1.55	\$5,291,000	\$997,000	\$4,294,000	\$3,414,000
F/V THE BOSS	2004	OR	200	\$926,100	1.55	\$1,435,000	\$997,000	\$438,000	\$926,000

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**Vessel Type: Fishing Vessel (Cont.)**

Vessel Name	Incident Year	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
F/V MILKY WAY	2005	WA	200	\$1,005,100	1.50	\$1,508,000	\$997,000	\$511,000	\$539,000
CAPT MIKE	2009	LA	100	\$2,413,400	1.37	\$3,306,000	\$997,000	\$2,309,000	\$2,413,000
F/V MAR-GUN	2009	AK	200	\$1,442,500	1.37	\$1,976,000	\$997,000	\$979,000	\$199,000
DEEP SEA	2012	WA	200	\$3,015,600	1.27	\$3,830,000	\$997,000	\$2,833,000	\$3,024,000
F/V LONE STAR	2013	AK	100	\$3,398,400	1.25	\$4,248,000	\$997,000	\$3,251,000	\$3,398,000
DAIKI MARU 7	2014	GU	100	\$1,550,000	1.23	\$1,907,000	\$997,000	\$909,000	\$63,000
F/V PACIFIC PARADISE	2017	HI	200	\$2,500,000	1.19	\$2,975,000	\$997,000	\$1,978,000	\$1,657,000
PAPPYS PRIDE	2020	TX	200	\$969,000	1.14	\$1,105,000	\$997,000	\$108,000	\$969,000
F/V AMERICAN CHALLENGER	2021	CA	200	\$2,383,000	1.09	\$2,598,000	\$997,000	\$1,600,000	\$2,383,000
F/V ST PATRICK	2021	AK	200	\$4,000,000	1.09	\$4,360,000	\$997,000	\$3,363,000	\$4,000,000
<b>Total</b>						<b>\$90,808,000</b>	<b>\$32,919,000</b>	<b>\$57,889,000</b>	<b>\$53,752,000</b>

**Vessel Type: Cargo/Other SPV**

M/V CITRUS	1996	AK	3,500	\$8,469,100	1.87	\$15,837,000	\$4,192,000	\$11,646,000	\$433,000
M/V KUROSHIMA	1997	AK	4,200	\$19,702,600	1.83	\$36,056,000	\$4,992,000	\$31,064,000	\$17,540,000
M/V KURE	1997	CA	36,000	\$47,218,900	1.83	\$86,411,000	\$43,211,000	\$43,200,000	\$711,000
M/V NEW CARISSA	1999	OR	36,600	\$50,501,400	1.76	\$88,882,000	\$43,885,000	\$44,997,000	\$26,775,000
M/V STUYVESANT	1999	CA	7,100	\$11,700,000	1.76	\$20,592,000	\$8,533,000	\$12,059,000	\$379,000
M/V SERGO ZAKARIADZE	1999	PR	16,500	\$15,966,700	1.76	\$28,101,000	\$19,802,000	\$8,299,000	\$6,065,000
SS J LUCKENBACH	2001	CA	7,900	\$42,497,300	1.64	\$69,696,000	\$9,443,000	\$60,253,000	\$47,815,000
M/V KIMTON	2001	PR	200	\$713,700	1.64	\$1,171,000	\$997,000	\$173,000	\$714,000
VICTORIA ROSE HUNT	2003	MA	100	\$1,085,700	1.59	\$1,726,000	\$997,000	\$729,000	\$94,000
M/V RED DIAMOND	2003	FL	200	\$2,595,200	1.59	\$4,126,000	\$997,000	\$3,129,000	\$2,595,000
CRANE BARGE MONARCH	2003	CA	200	\$2,481,700	1.59	\$3,946,000	\$997,000	\$2,949,000	\$2,482,000
M/V BOWSTRING	2003	FL	300	\$1,606,500	1.59	\$2,554,000	\$997,000	\$1,557,000	\$1,606,000
M/V SELENDANG AYU	2004	AK	39,800	\$137,293,200	1.55	\$212,804,000	\$47,706,000	\$165,098,000	\$102,384,000
M/V ORIENTAL I	2004	FL	200	\$727,400	1.55	\$1,127,000	\$997,000	\$130,000	\$727,000
ALBION	2005	CA	200	\$1,207,100	1.50	\$1,811,000	\$997,000	\$813,000	\$1,207,000
M/V CASITAS	2005	HI	300	\$1,710,700	1.50	\$2,566,000	\$997,000	\$1,569,000	\$1,711,000
MAMA LERE	2006	TX	400	\$1,217,300	1.44	\$1,753,000	\$997,000	\$756,000	\$1,217,000
M/V COSCO BUSAN	2007	CA	65,100	\$110,557,900	1.41	\$155,887,000	\$78,157,000	\$77,729,000	\$4,208,000
M/V SENECA	2007	MI	200	\$1,211,000	1.41	\$1,708,000	\$997,000	\$710,000	\$1,211,000
LST-1166	2007	OR	2,400	\$5,151,000	1.41	\$7,263,000	\$2,902,000	\$4,361,000	\$5,151,000
CATALA	2007	WA	5,700	\$6,138,500	1.41	\$8,655,000	\$6,840,000	\$1,815,000	\$6,138,000
C/V SEA WITCH	2008	MD	17,900	\$20,629,900	1.35	\$27,850,000	\$21,482,000	\$6,368,000	\$20,630,000
BIG BOY & SCOOPY DOO	2008	PA	200	\$1,010,800	1.35	\$1,365,000	\$997,000	\$368,000	\$1,011,000
WENONAH	2009	CA	300	\$947,800	1.37	\$1,298,000	\$997,000	\$301,000	\$948,000
SOUND DEVELOPER	2009	AK	200	\$1,657,100	1.37	\$2,270,000	\$997,000	\$1,273,000	\$1,657,000
MONARCH	2009	AK	300	\$2,097,500	1.37	\$2,874,000	\$997,000	\$1,876,000	\$1,333,000
M/V PRINCESS KATHLEEN	2010	AK	5,900	\$14,185,900	1.34	\$19,009,000	\$7,050,000	\$11,959,000	\$14,186,000
DAVY CROCKETT	2011	WA	4,600	\$22,457,500	1.29	\$28,970,000	\$5,572,000	\$23,399,000	\$22,458,000
TUG TIGER	2011	CA	200	\$4,205,500	1.29	\$5,425,000	\$997,000	\$4,428,000	\$4,205,000
JIREH	2012	PR	1,000	\$16,514,100	1.27	\$20,973,000	\$1,175,000	\$19,798,000	\$16,518,000
RESPECT	2013	CA	200	\$2,467,600	1.25	\$3,084,000	\$997,000	\$2,087,000	\$2,468,000
STEPHEN L. COLBY	2013	IA	200	\$1,355,600	1.25	\$1,694,000	\$997,000	\$697,000	\$1,356,000

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**Vessel Type: Cargo/Other SPV (Cont.)**

Vessel Name	Incident Year	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
M/V CHALLENGER	2015	AK	100	\$2,541,200	1.23	\$3,126,000	\$997,000	\$2,129,000	\$2,541,000
SPIRIT OF SACRAMENTO	2016	CA	100	\$1,514,800	1.22	\$1,848,000	\$997,000	\$851,000	\$1,515,000
TUG TUTAHACO	2017	FL	200	\$4,000,000	1.19	\$4,760,000	\$997,000	\$3,763,000	\$2,715,000
M/V AKUTAN	2017	AK	700	\$968,000	1.19	\$1,152,000	\$997,000	\$155,000	\$968,000
AKUTAN	2017	AK	700	\$949,800	1.19	\$1,130,000	\$997,000	\$133,000	\$950,000
POWHATAN	2017	AK	200	\$7,335,400	1.19	\$8,729,000	\$997,000	\$7,732,000	\$3,032,000
SS PETER STUYVESANT	2017	MA	1,700	\$2,400,000	1.19	\$2,856,000	\$2,065,000	\$791,000	\$109,000
D-B VENGEANCE	2017	CA	400	\$1,929,700	1.19	\$2,296,000	\$997,000	\$1,299,000	\$127,000
M/V OCEAN KING	2018	MA	200	\$1,475,600	1.16	\$1,712,000	\$997,000	\$715,000	\$1,046,000
S-2006	2018	MP	1,000	\$8,554,000	1.16	\$9,923,000	\$1,148,000	\$8,774,000	\$8,554,000
GRAND MARIANA I	2018	MP	400	\$3,310,700	1.16	\$3,840,000	\$997,000	\$2,843,000	\$1,461,000
GATE CITY	2018	WV	200	\$1,857,000	1.16	\$2,154,000	\$997,000	\$1,157,000	\$1,857,000
F/V PACIFIC KNIGHT	2018	AK	200	\$1,297,800	1.16	\$1,505,000	\$997,000	\$508,000	\$1,298,000
YP 702	2018	GA	200	\$1,544,800	1.16	\$1,792,000	\$997,000	\$795,000	\$1,545,000
GOLDEN RAY	2019	GA	71,200	\$175,000,000	1.14	\$199,500,000	\$85,414,000	\$114,086,000	\$7,481,000
F/V MIDWAY ISLAND	2020	HI	200	\$1,387,400	1.14	\$1,582,000	\$997,000	\$585,000	\$1,387,000
<b>Total</b>						<b>\$1,115,390,000</b>	<b>\$423,482,000</b>	<b>\$691,909,000</b>	<b>\$354,516,000</b>

<b>Grand Total</b>						<b>\$2,637,473,000</b>	<b>\$843,805,000</b>	<b>\$1,793,668,000</b>	<b>\$849,601,000</b>
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## Appendix B: Incidents Exceeding Liability Limits by Incident Date

### Incident Year: 1991

Vessel Type	Vessel Name	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
Fishing Vessel	F/V TENYO MARU	WA	4,200	\$6,062,900	2.16	\$13,096,000	\$5,000,000	\$8,095,000	\$6,063,000
Tank Barge (Single Hull)	T/B VISTABELLA	PR	1,100	\$5,740,000	2.16	\$12,398,000	\$7,479,000	\$4,920,000	\$4,782,000
<b>TOTAL</b>						<b>\$25,494,000</b>	<b>\$12,479,000</b>	<b>\$13,015,000</b>	<b>\$10,845,000</b>

### Incident Year: 1993

Fishing Vessel	F/V JIN SHIANG FA	AS	400	\$2,013,000	2.03	\$4,086,000	\$997,000	\$3,089,000	\$2,420,000
Tank Barge (Single Hull)	T/B (TAMPA BAY COLLISION)	FL	9,300	\$68,900,000	2.03	\$139,867,000	\$34,269,000	\$105,598,000	\$2,397,000
<b>TOTAL</b>						<b>\$143,953,000</b>	<b>\$35,266,000</b>	<b>\$108,687,000</b>	<b>\$4,817,000</b>

### Incident Year: 1994

Tank Barge (Single Hull)	T/B MORRIS J. BERMAN	PR	5,400	\$95,488,300	1.98	\$189,067,000	\$27,422,000	\$161,645,000	\$95,488,000
<b>TOTAL</b>						<b>\$189,067,000</b>	<b>\$27,422,000</b>	<b>\$161,645,000</b>	<b>\$95,488,000</b>

### Incident Year: 1996

Tank Barge (Single Hull)	M/V SCANDIA & T/B NORTH CAPE	RI	5,500	\$49,000,000	1.87	\$91,630,000	\$27,422,000	\$64,208,000	\$9,046,000
Tank Barge (Single Hull)	T/B BUFFALO #292	TX	1,500	\$15,864,400	1.87	\$29,666,000	\$7,479,000	\$22,188,000	\$16,810,000
Tank Ship (Single Hull)	T/V JULIE N	ME	18,500	\$52,601,200	1.87	\$98,364,000	\$68,365,000	\$29,999,000	\$28,376,000
Cargo/Other SPV	M/V CITRUS	AK	3,500	\$8,469,100	1.87	\$15,837,000	\$4,192,000	\$11,646,000	\$433,000
<b>TOTAL</b>						<b>\$235,497,000</b>	<b>\$107,458,000</b>	<b>\$128,041,000</b>	<b>\$54,665,000</b>

### Incident Year: 1997

Cargo/Other SPV	M/V KUROSHIMA	AK	4,200	\$19,702,600	1.83	\$36,056,000	\$4,992,000	\$31,064,000	\$17,540,000
Cargo/Other SPV	M/V KURE	CA	36,000	\$47,218,900	1.83	\$86,411,000	\$43,211,000	\$43,200,000	\$711,000
<b>TOTAL</b>						<b>\$122,467,000</b>	<b>\$48,203,000</b>	<b>\$74,264,000</b>	<b>\$18,251,000</b>

### Incident Year: 1999

Cargo/Other SPV	M/V NEW CARISSA	OR	36,600	\$50,501,400	1.76	\$88,882,000	\$43,885,000	\$44,997,000	\$26,775,000
Cargo/Other SPV	M/V STUYVESANT	CA	7,100	\$11,700,000	1.76	\$20,592,000	\$8,533,000	\$12,059,000	\$379,000
Cargo/Other SPV	M/V SERGO ZAKARIADZE	PR	16,500	\$15,966,700	1.76	\$28,101,000	\$19,802,000	\$8,299,000	\$6,065,000

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**Incident Year: 1999 (Cont.)**

Vessel Type	Vessel Name	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
Fishing Vessel	F/V YU TE NO. 1	AS	200	\$1,164,600	1.76	\$2,050,000	\$997,000	\$1,053,000	\$5,296,000
Fishing Vessel	F/V AMIGA NO. 5	AS	200	\$3,355,700	1.76	\$5,906,000	\$997,000	\$4,909,000	\$2,766,000
Fishing Vessel	F/V KWANG MYONG	AS	200	\$1,554,800	1.76	\$2,736,000	\$997,000	\$1,739,000	\$965,000
Fishing Vessel	F/V KORAM NO. 3	AS	200	\$1,403,100	1.76	\$2,469,000	\$997,000	\$1,472,000	\$813,000
Fishing Vessel	F/V KWANG MYONG NO 72	AS	200	\$2,182,900	1.76	\$3,842,000	\$997,000	\$2,845,000	\$1,593,000
Fishing Vessel	F/V KWANG MYONG NO 58	AS	200	\$1,557,600	1.76	\$2,741,000	\$997,000	\$1,744,000	\$967,000
Fishing Vessel	F/V KORAM NO 1	AS	200	\$1,378,400	1.76	\$2,426,000	\$997,000	\$1,429,000	\$788,000
Fishing Vessel	F/V KWANG MYONG NO 51	AS	200	\$1,249,200	1.76	\$2,199,000	\$997,000	\$1,201,000	\$659,000
<b>TOTAL</b>						<b>\$161,944,000</b>	<b>\$80,196,000</b>	<b>\$81,747,000</b>	<b>\$47,066,000</b>

**Incident Year: 2000**

Fishing Vessel	F/V JESSICA ANN	ME	200	\$947,000	1.70	\$1,610,000	\$997,000	\$613,000	\$947,000
Fishing Vessel	F/V SWORDMAN I	HI	100	\$1,528,600	1.70	\$2,599,000	\$997,000	\$1,602,000	\$1,529,000
<b>TOTAL</b>						<b>\$4,209,000</b>	<b>\$1,994,000</b>	<b>\$2,215,000</b>	<b>\$2,476,000</b>

**Incident Year: 2001**

Cargo/Other SPV	SS J LUCKENBACH	CA	7,900	\$42,497,300	1.64	\$69,696,000	\$9,443,000	\$60,253,000	\$47,815,000
Cargo/Other SPV	M/V KIMTON	PR	200	\$713,700	1.64	\$1,171,000	\$997,000	\$173,000	\$714,000
Fishing Vessel	F/V WINDY BAY	AK	400	\$3,396,400	1.64	\$5,570,000	\$997,000	\$4,573,000	\$3,396,000
Fishing Vessel	F/V VANGUARD	AK	200	\$699,800	1.64	\$1,148,000	\$997,000	\$151,000	\$700,000
<b>TOTAL</b>						<b>\$77,585,000</b>	<b>\$12,434,000</b>	<b>\$65,150,000</b>	<b>\$52,625,000</b>

**Incident Year: 2002**

Fishing Vessel	F/V GENEI MARU #7	AK	100	\$869,800	1.63	\$1,418,000	\$997,000	\$421,000	\$870,000
Fishing Vessel	F/V TERESA LYNN	FL	200	\$690,800	1.63	\$1,126,000	\$997,000	\$129,000	\$691,000
<b>TOTAL</b>						<b>\$2,544,000</b>	<b>\$1,994,000</b>	<b>\$550,000</b>	<b>\$1,561,000</b>

**Incident Year: 2003**

Cargo/Other SPV	VICTORIA ROSE HUNT	MA	100	\$1,085,700	1.59	\$1,726,000	\$997,000	\$729,000	\$94,000
Cargo/Other SPV	M/V RED DIAMOND	FL	200	\$2,595,200	1.59	\$4,126,000	\$997,000	\$3,129,000	\$2,595,000
Cargo/Other SPV	CRANE BARGE MONARCH	CA	200	\$2,481,700	1.59	\$3,946,000	\$997,000	\$2,949,000	\$2,482,000
Cargo/Other SPV	M/V BOWSTRING	FL	300	\$1,606,500	1.59	\$2,554,000	\$997,000	\$1,557,000	\$1,606,000
Tank Barge (Single Hull)	T/B B NO. 120	MA	6,900	\$59,261,100	1.59	\$94,225,000	\$27,422,000	\$66,803,000	\$1,753,000
<b>TOTAL</b>						<b>\$106,577,000</b>	<b>\$31,410,000</b>	<b>\$75,167,000</b>	<b>\$8,530,000</b>

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**Incident Year: 2004**

Vessel Type	Vessel Name	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
Fishing Vessel	F/V NEW HORIZON	CA	100	\$805,300	1.55	\$1,248,000	\$997,000	\$251,000	\$305,000
Cargo/Other SPV	M/V SELENDANG AYU	AK	39,800	\$137,293,200	1.55	\$212,804,000	\$47,706,000	\$165,098,000	\$102,384,000
Fishing Vessel	F/V MWALIL SAAT	GU	200	\$3,413,500	1.55	\$5,291,000	\$997,000	\$4,294,000	\$3,414,000
Fishing Vessel	F/V THE BOSS	OR	200	\$926,100	1.55	\$1,435,000	\$997,000	\$438,000	\$926,000
Tank Ship (Single Hull)	T/V ATHOS I	NJ	37,900	\$252,502,200	1.55	\$391,378,000	\$140,212,000	\$251,167,000	\$210,557,000
Cargo/Other SPV	M/V ORIENTAL I	FL	200	\$727,400	1.55	\$1,127,000	\$997,000	\$130,000	\$727,000
<b>TOTAL</b>						<b>\$613,283,000</b>	<b>\$191,906,000</b>	<b>\$421,378,000</b>	<b>\$318,313,000</b>

**Incident Year: 2005**

Tank Barge (Double Hull)	T/B DBL 152	LA	9,700	\$51,556,200	1.50	\$77,334,000	\$22,404,000	\$54,930,000	\$24,621,000
Cargo/Other SPV	ALBION	CA	200	\$1,207,100	1.50	\$1,811,000	\$997,000	\$813,000	\$1,207,000
Cargo/Other SPV	M/V CASITAS	HI	300	\$1,710,700	1.50	\$2,566,000	\$997,000	\$1,569,000	\$1,711,000
Tank Barge (Single Hull)	T/B EMC 423	IL	1,400	\$10,188,600	1.50	\$15,283,000	\$7,479,000	\$7,804,000	\$10,189,000
Fishing Vessel	F/V MILKY WAY	WA	200	\$1,005,100	1.50	\$1,508,000	\$997,000	\$511,000	\$539,000
<b>TOTAL</b>						<b>\$98,502,000</b>	<b>\$32,874,000</b>	<b>\$65,627,000</b>	<b>\$38,267,000</b>

**Incident Year: 2006**

Cargo/Other SPV	MAMA LERE	TX	400	\$1,217,300	1.44	\$1,753,000	\$997,000	\$756,000	\$1,217,000
<b>TOTAL</b>						<b>\$1,753,000</b>	<b>\$997,000</b>	<b>\$756,000</b>	<b>\$1,217,000</b>

**Incident Year: 2007**

Cargo/Other SPV	M/V COSCO BUSAN	CA	65,100	\$110,557,900	1.41	\$155,887,000	\$78,157,000	\$77,729,000	\$4,208,000
Cargo/Other SPV	M/V SENECA	MI	200	\$1,211,000	1.41	\$1,708,000	\$997,000	\$710,000	\$1,211,000
Cargo/Other SPV	LST-1166	OR	2,400	\$5,151,000	1.41	\$7,263,000	\$2,902,000	\$4,361,000	\$5,151,000
Cargo/Other SPV	CATALA	WA	5,700	\$6,138,500	1.41	\$8,655,000	\$6,840,000	\$1,815,000	\$6,138,000
<b>TOTAL</b>						<b>\$173,513,000</b>	<b>\$88,896,000</b>	<b>\$84,615,000</b>	<b>\$16,708,000</b>

**Incident Year: 2008**

Tank Barge (Double Hull)	T/B DM932	LA	800	\$104,460,700	1.35	\$141,022,000	\$4,986,000	\$136,036,000	\$23,406,000
Cargo/Other SPV	C/V SEA WITCH	MD	17,900	\$20,629,900	1.35	\$27,850,000	\$21,482,000	\$6,368,000	\$20,630,000
Cargo/Other SPV	BIG BOY & SCOOPY DOO	PA	200	\$1,010,800	1.35	\$1,365,000	\$997,000	\$368,000	\$1,011,000
<b>TOTAL</b>						<b>\$170,237,000</b>	<b>\$27,465,000</b>	<b>\$142,772,000</b>	<b>\$45,047,000</b>

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**Incident Year: 2009**

Vessel Type	Vessel Name	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
Fishing Vessel	CAPT MIKE	LA	100	\$2,413,400	1.37	\$3,306,000	\$997,000	\$2,309,000	\$2,413,000
Cargo/Other SPV	WENONAH	CA	300	\$947,800	1.37	\$1,298,000	\$997,000	\$301,000	\$948,000
Cargo/Other SPV	SOUND DEVELOPER	AK	200	\$1,657,100	1.37	\$2,270,000	\$997,000	\$1,273,000	\$1,657,000
Cargo/Other SPV	MONARCH	AK	300	\$2,097,500	1.37	\$2,874,000	\$997,000	\$1,876,000	\$1,333,000
Fishing Vessel	F/V MAR-GUN	AK	200	\$1,442,500	1.37	\$1,976,000	\$997,000	\$979,000	\$199,000
<b>TOTAL</b>						<b>\$11,724,000</b>	<b>\$4,985,000</b>	<b>\$6,738,000</b>	<b>\$6,550,000</b>

**Incident Year: 2010**

Cargo/Other SPV	M/V PRINCESS KATHLEEN	AK	5,900	\$14,185,900	1.34	\$19,009,000	\$7,050,000	\$11,959,000	\$14,186,000
<b>TOTAL</b>						<b>\$19,009,000</b>	<b>\$7,050,000</b>	<b>\$11,959,000</b>	<b>\$14,186,000</b>

**Incident Year: 2011**

Cargo/Other SPV	DAVY CROCKETT	WA	4,600	\$22,457,500	1.29	\$28,970,000	\$5,572,000	\$23,399,000	\$22,458,000
Cargo/Other SPV	TUG TIGER	CA	200	\$4,205,500	1.29	\$5,425,000	\$997,000	\$4,428,000	\$4,205,000
<b>TOTAL</b>						<b>\$34,395,000</b>	<b>\$6,569,000</b>	<b>\$27,827,000</b>	<b>\$26,663,000</b>

**Incident Year: 2012**

Cargo/Other SPV	JIREH	PR	1,000	\$16,514,100	1.27	\$20,973,000	\$1,175,000	\$19,798,000	\$16,518,000
Fishing Vessel	DEEP SEA	WA	200	\$3,015,600	1.27	\$3,830,000	\$997,000	\$2,833,000	\$3,024,000
Tank Barge (Single Hull)	BOSTON 30	NY	1,600	\$17,167,900	1.27	\$21,803,000	\$7,479,000	\$14,324,000	\$8,818,000
<b>TOTAL</b>						<b>\$46,606,000</b>	<b>\$9,651,000</b>	<b>\$36,955,000</b>	<b>\$28,360,000</b>

**Incident Year: 2013**

Fishing Vessel	F/V LONE STAR	AK	100	\$3,398,400	1.25	\$4,248,000	\$997,000	\$3,251,000	\$3,398,000
Cargo/Other SPV	RESPECT	CA	200	\$2,467,600	1.25	\$3,084,000	\$997,000	\$2,087,000	\$2,468,000
Cargo/Other SPV	STEPHEN L. COLBY	IA	200	\$1,355,600	1.25	\$1,694,000	\$997,000	\$697,000	\$1,356,000
<b>TOTAL</b>						<b>\$9,026,000</b>	<b>\$2,991,000</b>	<b>\$6,035,000</b>	<b>\$7,222,000</b>

**Incident Year: 2014**

Tank Barge (Double Hull)	KIRBY 27706	TX	1,600	\$105,069,500	1.23	\$129,235,000	\$4,986,000	\$124,250,000	\$5,090,000
Fishing Vessel	DAIKI MARU 7	GU	100	\$1,550,000	1.23	\$1,907,000	\$997,000	\$909,000	\$63,000
<b>TOTAL</b>						<b>\$131,142,000</b>	<b>\$5,983,000</b>	<b>\$125,159,000</b>	<b>\$5,153,000</b>

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**Incident Year: 2015**

Vessel Type	Vessel Name	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
Cargo/Other SPV	M/V CHALLENGER	AK	100	\$2,541,200	1.23	\$3,126,000	\$997,000	\$2,129,000	\$2,541,000
<b>TOTAL</b>						<b>\$3,126,000</b>	<b>\$997,000</b>	<b>\$2,129,000</b>	<b>\$2,541,000</b>

**Incident Year: 2016**

Cargo/Other SPV	SPIRIT OF SACRAMENTO	CA	100	\$1,514,800	1.22	\$1,848,000	\$997,000	\$851,000	\$1,515,000
<b>TOTAL</b>						<b>\$1,848,000</b>	<b>\$997,000</b>	<b>\$851,000</b>	<b>\$1,515,000</b>

**Incident Year: 2017**

Cargo/Other SPV	TUG TUTAHACO	FL	200	\$4,000,000	1.19	\$4,760,000	\$997,000	\$3,763,000	\$2,715,000
Cargo/Other SPV	M/V AKUTAN	AK	700	\$968,000	1.19	\$1,152,000	\$997,000	\$155,000	\$968,000
Fishing Vessel	F/V PACIFIC PARADISE	HI	200	\$2,500,000	1.19	\$2,975,000	\$997,000	\$1,978,000	\$1,657,000
Cargo/Other SPV	AKUTAN	AK	700	\$949,800	1.19	\$1,130,000	\$997,000	\$133,000	\$950,000
Cargo/Other SPV	POWHATAN	AK	200	\$7,335,400	1.19	\$8,729,000	\$997,000	\$7,732,000	\$3,032,000
Cargo/Other SPV	SS PETER STUYVESANT	MA	1,700	\$2,400,000	1.19	\$2,856,000	\$2,065,000	\$791,000	\$109,000
Cargo/Other SPV	D-B VENGEANCE	CA	400	\$1,929,700	1.19	\$2,296,000	\$997,000	\$1,299,000	\$127,000
<b>TOTAL</b>						<b>\$23,898,000</b>	<b>\$8,047,000</b>	<b>\$15,851,000</b>	<b>\$9,558,000</b>

**Incident Year: 2018**

Cargo/Other SPV	M/V OCEAN KING	MA	200	\$1,475,600	1.16	\$1,712,000	\$997,000	\$715,000	\$1,046,000
Cargo/Other SPV	S-2006	MP	1,000	\$8,554,000	1.16	\$9,923,000	\$1,148,000	\$8,774,000	\$8,554,000
Cargo/Other SPV	GRAND MARIANA I	MP	400	\$3,310,700	1.16	\$3,840,000	\$997,000	\$2,843,000	\$1,461,000
Cargo/Other SPV	GATE CITY	WV	200	\$1,857,000	1.16	\$2,154,000	\$997,000	\$1,157,000	\$1,857,000
Cargo/Other SPV	F/V PACIFIC KNIGHT	AK	200	\$1,297,800	1.16	\$1,505,000	\$997,000	\$508,000	\$1,298,000
Cargo/Other SPV	YP 702	GA	200	\$1,544,800	1.16	\$1,792,000	\$997,000	\$795,000	\$1,545,000
<b>TOTAL</b>						<b>\$20,926,000</b>	<b>\$3,142,000</b>	<b>\$14,792,000</b>	<b>\$15,761,000</b>

**Incident Year: 2019**

Cargo/Other SPV	GOLDEN RAY	GA	71,200	\$175,000,000	1.14	\$199,500,000	\$85,414,000	\$114,086,000	\$7,481,000
<b>TOTAL</b>						<b>\$199,500,000</b>	<b>\$85,414,000</b>	<b>\$114,086,000</b>	<b>\$7,481,000</b>

**Incident Year: 2020**

Cargo/Other SPV	F/V MIDWAY ISLAND	HI	200	\$1,387,400	1.14	\$1,582,000	\$997,000	\$585,000	\$1,387,000
Fishing Vessel	PAPPYS PRIDE	TX	200	\$969,000	1.14	\$1,105,000	\$997,000	\$108,000	\$969,000
<b>TOTAL</b>						<b>\$2,687,000</b>	<b>\$1,994,000</b>	<b>\$693,000</b>	<b>\$2,356,000</b>

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**Incident Year: 2021**

Vessel Type	Vessel Name	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred
Fishing Vessel	F/V AMERICAN CHALLENGER	CA	200	\$2,383,000	1.09	\$2,598,000	\$997,000	\$1,600,000	\$2,383,000
Fishing Vessel	F/V ST PATRICK	AK	200	\$4,000,000	1.09	\$4,360,000	\$997,000	\$3,363,000	\$4,000,000
<b>TOTAL</b>						<b>\$6,958,000</b>	<b>\$1,994,000</b>	<b>\$4,963,000</b>	<b>\$6,383,000</b>

<b>Total 1990-2005</b>	<b>\$1,781,124,000</b>	<b>\$583,639,000</b>	<b>\$1,197,485,000</b>	<b>\$652,901,000</b>
<b>Total 2006-2022</b>	<b>\$856,349,000</b>	<b>\$260,166,000</b>	<b>\$596,183,000</b>	<b>\$196,700,000</b>

<b>GRAND TOTAL</b>	<b>\$2,637,473,000</b>	<b>\$843,805,000</b>	<b>\$1,793,668,000</b>	<b>\$849,601,000</b>
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# Appendix C: Incidents Exceeding Liability Limits with Limits to Achieve 50 Percent Cost Share

## Vessel Type: Tank Ship (Single Hull)

Vessel Name	Incident Year	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred	Gross Ton Liability Limits for a 50% Cost Share	Minimum Liability for a 50% Cost Share
										Shaded Area Indicates Higher Limit Which Would Be Applied	
T/V JULIE N	1996	ME	18,500	\$52,601,200	1.87	\$98,364,000	\$68,365,000	\$29,999,000	\$28,376,000	\$79,451,100	\$122,400,000
T/V ATHOS 1	2004	NJ	37,900	\$252,502,200	1.55	\$391,378,000	\$140,212,000	\$251,167,000	\$210,557,000	\$162,948,500	\$122,400,000
<b>Total</b>						<b>\$489,743,000</b>	<b>\$208,576,000</b>	<b>\$281,166,000</b>	<b>\$238,933,000</b>		

## Vessel Type: Tank Barge (Single Hull)

T/B VISTABELLA	1991	PR	1,100	\$5,740,000	2.16	\$12,398,000	\$7,479,000	\$4,920,000	\$4,782,000	\$9,919,000	\$37,100,000
T/B (TAMPA BAY COLLISION)	1993	FL	9,300	\$68,900,000	2.03	\$139,867,000	\$34,269,000	\$105,598,000	\$2,397,000	\$84,284,200	\$37,100,000
T/B MORRIS J. BERMAN	1994	PR	5,400	\$95,488,300	1.98	\$189,067,000	\$27,422,000	\$161,645,000	\$95,488,000	\$48,930,700	\$37,100,000
M/V SCANDIA & T/B NORTH CAPE	1996	RI	5,500	\$49,000,000	1.87	\$91,630,000	\$27,422,000	\$64,208,000	\$9,046,000	\$50,104,600	\$37,100,000
T/B BUFFALO #292	1996	TX	1,500	\$15,864,400	1.87	\$29,666,000	\$7,479,000	\$22,188,000	\$16,810,000	\$13,677,300	\$37,100,000
T/B B NO. 120	2003	MA	6,900	\$59,261,100	1.59	\$94,225,000	\$27,422,000	\$66,803,000	\$1,753,000	\$62,507,900	\$37,100,000
T/B EMC 423	2005	IL	1,400	\$10,188,600	1.50	\$15,283,000	\$7,479,000	\$7,804,000	\$10,189,000	\$12,712,700	\$37,100,000
BOSTON 30	2012	NY	1,600	\$17,167,900	1.27	\$21,803,000	\$7,479,000	\$14,324,000	\$8,818,000	\$14,869,400	\$37,100,000
<b>Total</b>						<b>\$593,940,000</b>	<b>\$146,451,000</b>	<b>\$447,489,000</b>	<b>\$149,283,000</b>		

## Vessel Type: Tank Barge (Double Hull)

T/B DBL 152	2005	LA	9,700	\$51,556,200	1.50	\$77,334,000	\$22,404,000	\$54,930,000	\$24,621,000	\$139,296,300	\$57,900,000
T/B DM932	2008	LA	800	\$104,460,700	1.35	\$141,022,000	\$4,986,000	\$136,036,000	\$23,406,000	\$11,411,400	\$57,900,000
KIRBY 27706	2014	TX	1,600	\$105,069,500	1.23	\$129,235,000	\$4,986,000	\$124,250,000	\$5,090,000	\$23,337,600	\$57,900,000
<b>Total</b>						<b>\$347,592,000</b>	<b>\$32,376,000</b>	<b>\$315,216,000</b>	<b>\$53,117,000</b>		

## Vessel Type: SPV > 300 GT

F/V TENYO MARU	1991	WA	4,200	\$6,062,900	2.16	\$13,096,000	\$5,000,000	\$8,095,000	\$6,063,000	\$6,667,200	\$19,900,000
F/V JIN SHIANG FA	1993	AS	400	\$2,013,000	2.03	\$4,086,000	\$997,000	\$3,089,000	\$2,420,000	\$580,800	\$19,900,000
M/V CITRUS	1996	AK	3,500	\$8,469,100	1.87	\$15,837,000	\$4,192,000	\$11,646,000	\$433,000	\$5,588,800	\$19,900,000
M/V KUROSHIMA	1997	AK	4,200	\$19,702,600	1.83	\$36,056,000	\$4,992,000	\$31,064,000	\$17,540,000	\$6,656,000	\$19,900,000
M/V KURE	1997	CA	36,000	\$47,218,900	1.83	\$86,411,000	\$43,211,000	\$43,200,000	\$711,000	\$57,614,400	\$19,900,000
M/V NEW CARISSA	1999	OR	36,600	\$50,501,400	1.76	\$88,882,000	\$43,885,000	\$44,997,000	\$26,775,000	\$58,513,600	\$19,900,000
M/V STUYVESANT	1999	CA	7,100	\$11,700,000	1.76	\$20,592,000	\$8,533,000	\$12,059,000	\$379,000	\$11,377,600	\$19,900,000
M/V SERGO ZAKARIADZE	1999	PR	16,500	\$15,966,700	1.76	\$28,101,000	\$19,802,000	\$8,299,000	\$6,065,000	\$26,403,200	\$19,900,000
F/V WINDY BAY	2001	AK	400	\$3,396,400	1.64	\$5,570,000	\$997,000	\$4,573,000	\$3,396,000	\$648,000	\$19,900,000
SS J LUCKENBACH	2001	CA	7,900	\$42,497,300	1.64	\$69,696,000	\$9,443,000	\$60,253,000	\$47,815,000	\$12,590,400	\$19,900,000
M/V BOWSTRING	2003	FL	300	\$1,606,500	1.59	\$2,554,000	\$997,000	\$1,557,000	\$1,606,000	\$545,600	\$19,900,000
M/V SELENDANG AYU	2004	AK	39,800	\$137,293,200	1.55	\$212,804,000	\$47,706,000	\$165,098,000	\$102,384,000	\$63,608,000	\$19,900,000
MAMA LERE	2006	TX	400	\$1,217,300	1.44	\$1,753,000	\$997,000	\$756,000	\$1,217,000	\$590,400	\$19,900,000

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Vessel Type: SPV > 300 GT (Cont.)

Vessel Name	Incident Year	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred	Gross Ton Liability Limits for a 50% Cost Share	Minimum Liability for a 50% Cost Share
										Shaded Area Indicates Higher Limit Which Would Be Applied	
M/V COSCO BUSAN	2007	CA	65,100	\$110,557,900	1.41	\$155,887,000	\$78,157,000	\$77,729,000	\$4,208,000	\$104,209,600	\$19,900,000
LST-1166	2007	OR	2,400	\$5,151,000	1.41	\$7,263,000	\$2,902,000	\$4,361,000	\$5,151,000	\$3,868,800	\$19,900,000
CATALA	2007	WA	5,700	\$6,138,500	1.41	\$8,655,000	\$6,840,000	\$1,815,000	\$6,138,000	\$9,120,000	\$19,900,000
C/V SEA WITCH	2008	MD	17,900	\$20,629,900	1.35	\$27,850,000	\$21,482,000	\$6,368,000	\$20,630,000	\$28,643,200	\$19,900,000
M/V PRINCESS KATHLEEN	2010	AK	5,900	\$14,185,900	1.34	\$19,009,000	\$7,050,000	\$11,959,000	\$14,186,000	\$9,400,000	\$19,900,000
DAVY CROCKETT	2011	WA	4,600	\$22,457,500	1.29	\$28,970,000	\$5,572,000	\$23,399,000	\$22,458,000	\$7,428,800	\$19,900,000
JIREH	2012	PR	1,000	\$16,514,100	1.27	\$20,973,000	\$1,175,000	\$19,798,000	\$16,518,000	\$1,566,400	\$19,900,000
M/V AKUTAN	2017	AK	700	\$968,000	1.19	\$1,152,000	\$997,000	\$155,000	\$968,000	\$1,198,400	\$19,900,000
AKUTAN	2017	AK	700	\$949,800	1.19	\$1,130,000	\$997,000	\$133,000	\$950,000	\$1,198,400	\$19,900,000
SS PETER STUYVESANT	2017	MA	1,700	\$2,400,000	1.19	\$2,856,000	\$2,065,000	\$791,000	\$109,000	\$2,753,600	\$19,900,000
D-B VENGEANCE	2017	CA	400	\$1,929,700	1.19	\$2,296,000	\$997,000	\$1,299,000	\$127,000	\$708,800	\$19,900,000
S-2006	2018	MP	1,000	\$8,554,000	1.16	\$9,923,000	\$1,148,000	\$8,774,000	\$8,554,000	\$1,531,200	\$19,900,000
GRAND MARIANA I	2018	MP	400	\$3,310,700	1.16	\$3,840,000	\$997,000	\$2,843,000	\$1,461,000	\$710,400	\$19,900,000
GOLDEN RAY	2019	GA	71,200	\$175,000,000	1.14	\$199,500,000	\$85,414,000	\$114,086,000	\$7,481,000	\$113,884,800	\$19,900,000
<b>Total</b>						<b>\$1,074,744,000</b>	<b>\$406,546,000</b>	<b>\$668,198,000</b>	<b>\$325,743,000</b>		

Vessel Type: SPV < or = 300 GT

F/V YU TE NO. 1	1999	AS	200	\$1,164,600	1.76	\$2,050,000	\$997,000	\$1,053,000	\$5,296,000	\$1,420,000	\$1,300,000
F/V AMIGA NO. 5	1999	AS	200	\$3,355,700	1.76	\$5,906,000	\$997,000	\$4,909,000	\$2,766,000	\$1,420,000	\$1,300,000
F/V KWANG MYONG	1999	AS	200	\$1,554,800	1.76	\$2,736,000	\$997,000	\$1,739,000	\$965,000	\$1,420,000	\$1,300,000
F/V KORAM NO. 3	1999	AS	200	\$1,403,100	1.76	\$2,469,000	\$997,000	\$1,472,000	\$813,000	\$1,420,000	\$1,300,000
F/V KWANG MYONG NO 72	1999	AS	200	\$2,182,900	1.76	\$3,842,000	\$997,000	\$2,845,000	\$1,593,000	\$1,420,000	\$1,300,000
F/V KWANG MYONG NO 58	1999	AS	200	\$1,557,600	1.76	\$2,741,000	\$997,000	\$1,744,000	\$967,000	\$1,420,000	\$1,300,000
F/V KORAM NO 1	1999	AS	200	\$1,378,400	1.76	\$2,426,000	\$997,000	\$1,429,000	\$788,000	\$1,420,000	\$1,300,000
F/V KWANG MYONG NO 51	1999	AS	200	\$1,249,200	1.76	\$2,199,000	\$997,000	\$1,201,000	\$659,000	\$1,420,000	\$1,300,000
F/V JESSICA ANN	2000	ME	200	\$947,000	1.70	\$1,610,000	\$997,000	\$613,000	\$947,000	\$1,228,300	\$1,300,000
F/V SWORDMAN I	2000	HI	100	\$1,528,600	1.70	\$2,599,000	\$997,000	\$1,602,000	\$1,529,000	\$766,800	\$1,300,000
M/V KIMTON	2001	PR	200	\$713,700	1.64	\$1,171,000	\$997,000	\$173,000	\$714,000	\$1,420,000	\$1,300,000
F/V VANGUARD	2001	AK	200	\$699,800	1.64	\$1,148,000	\$997,000	\$151,000	\$700,000	\$1,420,000	\$1,300,000
F/V GENEI MARU #7	2002	AK	100	\$869,800	1.63	\$1,418,000	\$997,000	\$421,000	\$870,000	\$979,800	\$1,300,000
F/V TERESA LYNN	2002	FL	200	\$690,800	1.63	\$1,126,000	\$997,000	\$129,000	\$691,000	\$1,420,000	\$1,300,000
VICTORIA ROSE HUNT	2003	MA	100	\$1,085,700	1.59	\$1,726,000	\$997,000	\$729,000	\$94,000	\$454,400	\$1,300,000
M/V RED DIAMOND	2003	FL	200	\$2,595,200	1.59	\$4,126,000	\$997,000	\$3,129,000	\$2,595,000	\$1,420,000	\$1,300,000
CRANE BARGE MONARCH	2003	CA	200	\$2,481,700	1.59	\$3,946,000	\$997,000	\$2,949,000	\$2,482,000	\$1,420,000	\$1,300,000
F/V NEW HORIZON	2004	CA	100	\$805,300	1.55	\$1,248,000	\$997,000	\$251,000	\$305,000	\$404,700	\$1,300,000
F/V MWALIL SAAT	2004	GU	200	\$3,413,500	1.55	\$5,291,000	\$997,000	\$4,294,000	\$3,414,000	\$1,164,400	\$1,300,000
F/V THE BOSS	2004	OR	200	\$926,100	1.55	\$1,435,000	\$997,000	\$438,000	\$926,000	\$1,420,000	\$1,300,000
M/V ORIENTAL I	2004	FL	200	\$727,400	1.55	\$1,127,000	\$997,000	\$130,000	\$727,000	\$1,420,000	\$1,300,000
F/V MILKY WAY	2005	WA	200	\$1,005,100	1.50	\$1,508,000	\$997,000	\$511,000	\$539,000	\$1,420,000	\$1,300,000
ALBION	2005	CA	200	\$1,207,100	1.50	\$1,811,000	\$997,000	\$813,000	\$1,207,000	\$1,420,000	\$1,300,000
M/V CASITAS	2005	HI	300	\$1,710,700	1.50	\$2,566,000	\$997,000	\$1,569,000	\$1,711,000	\$1,917,000	\$1,300,000
M/V SENECA	2007	MI	200	\$1,211,000	1.41	\$1,708,000	\$997,000	\$710,000	\$1,211,000	\$1,420,000	\$1,300,000

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Vessel Type: SPV < or = 300 GT (Cont.)

Vessel Name	Incident Year	Incident Location	Gross Tonnage	Total Incident Cost	Inflation Factor	Total Incident Cost (2022 Dollars)	Limits of Liability	Fund Exposure	Actual Fund Costs Incurred	Gross Ton Liability Limits for a 50% Cost Share	Minimum Liability for a 50% Cost Share
										Shaded Area Indicates Higher Limit Which Would Be Applied	
BIG BOY & SCOOPY DOO	2008	PA	200	\$1,010,800	1.35	\$1,365,000	\$997,000	\$368,000	\$1,011,000	\$1,412,900	\$1,300,000
CAPT MIKE	2009	LA	100	\$2,413,400	1.37	\$3,306,000	\$997,000	\$2,309,000	\$2,413,000	\$568,000	\$1,300,000
F/V MAR-GUN	2009	AK	200	\$1,442,500	1.37	\$1,976,000	\$997,000	\$979,000	\$199,000	\$1,370,300	\$1,300,000
WENONAH	2009	CA	300	\$947,800	1.37	\$1,298,000	\$997,000	\$301,000	\$948,000	\$2,059,000	\$1,300,000
SOUND DEVELOPER	2009	AK	200	\$1,657,100	1.37	\$2,270,000	\$997,000	\$1,273,000	\$1,657,000	\$1,420,000	\$1,300,000
MONARCH	2009	AK	300	\$2,097,500	1.37	\$2,874,000	\$997,000	\$1,876,000	\$1,333,000	\$2,108,700	\$1,300,000
TUG TIGER	2011	CA	200	\$4,205,500	1.29	\$5,425,000	\$997,000	\$4,428,000	\$4,205,000	\$1,420,000	\$1,300,000
DEEP SEA	2012	WA	200	\$3,015,600	1.27	\$3,830,000	\$997,000	\$2,833,000	\$3,024,000	\$1,398,700	\$1,300,000
F/V LONE STAR	2013	AK	100	\$3,398,400	1.25	\$4,248,000	\$997,000	\$3,251,000	\$3,398,000	\$1,036,600	\$1,300,000
RESPECT	2013	CA	200	\$2,467,600	1.25	\$3,084,000	\$997,000	\$2,087,000	\$2,468,000	\$1,420,000	\$1,300,000
STEPHEN L. COLBY	2013	IA	200	\$1,355,600	1.25	\$1,694,000	\$997,000	\$697,000	\$1,356,000	\$1,420,000	\$1,300,000
DAIKI MARU 7	2014	GU	100	\$1,550,000	1.23	\$1,907,000	\$997,000	\$909,000	\$63,000	\$823,600	\$1,300,000
M/V CHALLENGER	2015	AK	100	\$2,541,200	1.23	\$3,126,000	\$997,000	\$2,129,000	\$2,541,000	\$951,400	\$1,300,000
SPIRIT OF SACRAMENTO	2016	CA	100	\$1,514,800	1.22	\$1,848,000	\$997,000	\$851,000	\$1,515,000	\$702,900	\$1,300,000
F/V PACIFIC PARADISE	2017	HI	200	\$2,500,000	1.19	\$2,975,000	\$997,000	\$1,978,000	\$1,657,000	\$1,420,000	\$1,300,000
TUG TUTAHACO	2017	FL	200	\$4,000,000	1.19	\$4,760,000	\$997,000	\$3,763,000	\$2,715,000	\$1,420,000	\$1,300,000
POWHATAN	2017	AK	200	\$7,335,400	1.19	\$8,729,000	\$997,000	\$7,732,000	\$3,032,000	\$1,420,000	\$1,300,000
M/V OCEAN KING	2018	MA	200	\$1,475,600	1.16	\$1,712,000	\$997,000	\$715,000	\$1,046,000	\$1,420,000	\$1,300,000
GATE CITY	2018	WV	200	\$1,857,000	1.16	\$2,154,000	\$997,000	\$1,157,000	\$1,857,000	\$1,420,000	\$1,300,000
F/V PACIFIC KNIGHT	2018	AK	200	\$1,297,800	1.16	\$1,505,000	\$997,000	\$508,000	\$1,298,000	\$539,600	\$1,300,000
YP 702	2018	GA	200	\$1,544,800	1.16	\$1,792,000	\$997,000	\$795,000	\$1,545,000	\$1,420,000	\$1,300,000
PAPPYS PRIDE	2020	TX	200	\$969,000	1.14	\$1,105,000	\$997,000	\$108,000	\$969,000	\$1,420,000	\$1,300,000
F/V MIDWAY ISLAND	2020	HI	200	\$1,387,400	1.14	\$1,582,000	\$997,000	\$585,000	\$1,387,000	\$1,420,000	\$1,300,000
F/V AMERICAN CHALLENGER	2021	CA	200	\$2,383,000	1.09	\$2,598,000	\$997,000	\$1,600,000	\$2,383,000	\$1,420,000	\$1,300,000
F/V ST PATRICK	2021	AK	200	\$4,000,000	1.09	\$4,360,000	\$997,000	\$3,363,000	\$4,000,000	\$1,420,000	\$1,300,000
<b>Total</b>						<b>\$131,455,000</b>	<b>\$49,855,000</b>	<b>\$81,600,000</b>	<b>\$82,526,000</b>		

<b>Grand Total</b>						<b>\$2,637,473,000</b>	<b>\$843,805,000</b>	<b>\$1,793,668,000</b>	<b>\$849,601,000</b>		
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## Appendix D: Abbreviations

<b>Abbreviations</b>	<b>Definition</b>
CFR	Code of Federal Regulations
DOI	Department of the Interior
F/V	Fishing Vessel
M/V	Motor Vessel
NPFC	National Pollution Funds Center
NTSB	National Transportation Safety Board
OPA	Oil Pollution Act of 1990
RP	Responsible Party
SPV	Self-propelled Vessel
SS	Steamship
T/B	Tank Barge
T/V	Tank Vessel
U.S.C.	United States Code