

COMMENTS

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Administering America’s Offshore Oil Fields: How Fewer, Performance-Based Regulations Can Produce Better Results

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For the past twenty years, the United States has failed to effectively regulate the rapidly changing technology in the offshore oil industry. The April 20, 2010, explosion on the *Deepwater Horizon* in the Gulf of Mexico bore witness to the inadequacies that plague America’s offshore regulatory regime and emphasized the need for an overhaul. Since political compromise seems unlikely, legislative reform remains out of reach. However, with a bit of judicious administrative

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rulemaking, the President could reform America's offshore oil industry while avoiding protracted political battles. This administrative rulemaking would better protect America's coastlines and force oil producers to improve their safety procedures. All this could be accomplished without saddling the American taxpayer with a big bill. Furthermore, the answer does not require reinventing the wheel; the solution is in a system of performance-based regulations already used by some other oil-producing nations, including Great Britain and Norway.

Regulating the American offshore oil industry has always presented lawmakers with a complex set of challenges. First, the intricate technologies required to explore and extract oil under miles of ocean are constantly evolving, forcing regulators to continually update their drilling protocols.¹ Second, many deep-sea wells are located in ecologically sensitive areas, requiring a high level of operator sophistication to safely and efficiently extract hydrocarbons.² Third, the lucrative nature of the oil industry creates dangerous financial incentives for operators and regulators alike who both seek to generate revenue and skirt the edge of operational disaster.³ Fourth, the disparate technologies required to discover, drill, and extract offshore hydrocarbons have resulted in multitudes of specialized corporations working on the same well with no clear delineation of authority or safety responsibility.⁴ The result is an industry regulated by a technologically deficient government agency that is attempting to police producers who hew to the minimum of government-mandated safety regulations. It is an inapposite system of regulation in which safety takes a back seat to revenue production.

¹ See, e.g., Mike Paulin et al., *Technology evolves for Arctic development*, Feb. 1, 2011, OFFSHORE, <http://www.offshore-mag.com> (follow "Offshore's" hyperlink; then search for "technology evolves for arctic development;" then follow article hyperlink) (last visited Nov. 27, 2011).

² See, e.g., Kendra Bankoff, *Salazar Launches Full Review of Offshore Drilling Safety Issues during Visit to Oil Spill Command Centers on Gulf Coast*, U.S. DEP'T OF THE INTERIOR (Apr. 30, 2010), <http://www.doi.gov/news/pressreleases/Salazar-Launches-Full-Review-of-Offshore-Drilling-Safety-Issues-during-Visit-to-Oil-Spill-Command-Centers-on-Gulf-Coast.cfm> (last visited Nov. 27, 2011).

³ See, e.g., Edmund L. Andrews, *Government Cannot Halt Oil Incentives, Judge Rules*, N.Y. TIMES, Nov. 2, 2007, <http://www.nytimes.com/2007/11/02/business/02royalties.html?scp=1&sq=%22Government+cannot+halt+oil+incentives%22&st=nyt> (last visited Nov. 27, 2011).

⁴ See *infra* text accompanying note 24.

The British Petroleum (BP) disaster exposed numerous deficiencies in the American offshore oil regulatory system. Although offshore drilling operations are governed by a litany of statutes,⁵ the regulatory regime enforcing the legislation has proven to be wholly ineffective. The problem is that legislative solutions for improving safety and enforcing liability for disasters are inadequate, both because of a lack of bipartisan support for comprehensive reform and because a heavily-regulated prescriptive regime will never be able to incentivize oil producers to rapidly incorporate technological safety advances.

Part I of this Comment introduces the facts behind the BP disaster and compares the legal and legislative reactions to the *Exxon Valdez* and the *Deepwater Horizon* spills. Parts II–III document the development of the 1990 Oil Pollution Act and consider the Act's effectiveness in preventing offshore spills. In Part IV, this Comment investigates current legislative reform efforts and explores their potential for effectiveness. Part V delves into the history of the Minerals Management Service and explains how its contradictory mission and subsequent regulatory failings contributed to the *Deepwater Horizon* disaster. Parts VI–VIII compare and contrast prescriptive versus performance-based regulatory regimes, utilizing the British and Norwegian models as case studies. Part IX advocates for the implementation of a performance-based regulatory regime in the United States and considers the feasibility of utilizing administrative rulemaking to accomplish this goal. Generally, this Comment will touch upon how partisan legislation and overly prescriptive regulations have halted effective safety improvements and technological development in the American offshore oil industry.

I

BACKGROUND

The *Deepwater Horizon* was constructed in 2001 and was “capable of operating in water up to 8,000 feet deep and able to drill down to 30,000 feet.”⁶ The disaster occurred while Halliburton Energy Services, Inc. (Halliburton) was mounting production casing and

⁵ See Clean Water Act § 402, 33 U.S.C. § 1342 (1987), Marine Mammals Protection Act § 104, 16 U.S.C. 1374 (2003), Endangered Species Act § 7, 16 U.S.C. § 1536 (1973), Magnuson Stevens Fishery Conservation and Management Act § 305(b), 16 U.S.C. § 1855 (1976), and Coastal Zone Management Act § 307, 16 U.S.C. § 1456 (1966); see also *infra* text accompanying note 83.

⁶ Andrea J. Chambers & Jerry D. Brown, *The 2010 Gulf Oil Spill and Questions of Liability*, LEXIS NEXIS, Aug. 2010, at 1, available at 2010 Emerging Issues 5281.

cement on a 5,000 feet deep exploratory well in the Macondo Prospect. Ironically, integrity tests were due to be performed on the Macondo well at the time the explosion occurred, after which the well would have been capped until BP was prepared to begin extraction operations.⁷

Tragically, the fiery explosion that occurred onboard the *Deepwater Horizon* threw BP's plans into disarray, resulting in eleven deaths,⁸ millions of barrels of spewing oil,⁹ and immense damage to the Gulf Coast.¹⁰ The subsequent proliferation of monetary claims, lawsuits, and legislation¹¹ has raised numerous issues that stand to forever alter the regulatory structure of the offshore oil industry¹² as well as the liability schemes of international oil companies operating in the United States' coastal waters.¹³

A bill's passage through Congress is fraught with danger at every turn. In general, most bills are submitted by individual members of Congress, examined and voted upon by specialized committees, presented to both the House and Senate for approval, and, finally, submitted to the President for his signature. Thus, a well-meaning and complex bill can often only gain approval through an expenditure of serious political capital by at least one party or the occurrence of an event that exerts public pressure on both political parties to react expediently and deal with the crisis.¹⁴

Thus, while the Oil Pollution Prevention, Removal, Liability, and Compensation Act of 1989 was introduced in the immediate aftermath of the *Exxon Valdez* oil spill,¹⁵ the Act only became law after a quick succession of oil spills energized Congress.¹⁶

⁷ See *id.*

⁸ William M. Welch & Chris Joyner, *Memorial Service Honors 11 Dead Oil Rig Workers*, USA TODAY, (May 25, 2010, 11:59 PM), available at http://www.usatoday.com/news/nation/2010-05-25-oil-memorial-workers_N.htm?loc=interstitialskip (last visited Nov. 27, 2011).

⁹ *Id.*

¹⁰ See *id.*

¹¹ Chambers & Brown, *supra* note 6, at 1–5.

¹² *Id.* at 2.

¹³ *Id.*

¹⁴ Congressional Quarterly, *Approval of Liability Bills Spurred by Alaska Spill*, CONGR. Q. ALMANAC 45:682–87 (1989).

¹⁵ Russell V. Randle, *The Oil Pollution Act of 1990: Its Provisions, Intent, and Effects*, 21 ENVTL. L. REP. 10119, 10119 (1991), available at <http://www.ehr.info/articles/vol21/21.10119.pdf>.

¹⁶ Matthew Harrington, *Necessary and Proper, but Still Unconstitutional: The Oil Pollution Act's Delegation of Admiralty Power to the States*, 48 CASE W. RES. L. REV. 1,

Importantly, a large section of this bill addressed the relative dearth of technological development regarding oil spill response¹⁷ and attempted to resolve the issue by mandating research and technological innovation.¹⁸

Similarly, the flurried legislative response to the *Deepwater Horizon* disaster has resulted in several proposals that aim to enhance technological capacities regarding oil spill response.¹⁹ The 2010 Senate Bill 3515, introduced on June 21, 2010, is perhaps most relevant to this discussion; it seeks to “authorize and enhance the programs of the Department of the Interior relating to the detection of, response to, and mitigation and cleanup of oil spills on federal land managed by the Department, and for other purposes.”²⁰ To do so, the Bill establishes an advisory board in conjunction with the National Academy of the Sciences, awards research grants for oil spill prevention and mitigation projects, authorizes a pilot program for periodic field tests of new oil spill response technology, and establishes a twenty-five million dollar per year fund to carry out the program.²¹

The *Deepwater Horizon* accident has also raised several intriguing liability questions.²² The perplexing legal relationship between BP (the lessor of the *Deepwater Horizon*), Transocean (the owner of *Deepwater Horizon*), Halliburton Energy Services (the cement contractor), and Cameron International (the blowout preventer manufacturer) has served only to complicate the matter.²³ Observers

7–8 (1997) (referencing the World Prodigy spill in the Narragansett Bay, the Rachel-B spill in the Houston Ship Channel, and the President Rivera spill in the Delaware River).

¹⁷ Samuel K. Skinner & William K. Reilly, *The Exxon Valdez Oil Spill: A Report to the President*, THE NATIONAL RESPONSE TEAM 1, 37 (May 1989), <http://www.uscg.mil/history/webshipwrecks/ExxonValdezNRT1989Report.pdf>. (“The *Exxon Valdez* incident emphasized the need for greatly improved public and private research and development capabilities. Current response equipment is still inadequate in less than ideal conditions. Better mechanical, chemical, and biological strategies for cleanup are needed. The incident revealed how little we know about cold-water oil spill responses.”).

¹⁸ Oil Pollution Prevention, Removal, Liability, and Compensation Act of 1989, H.R. 1465, 101st Cong. Title III (1989).

¹⁹ See Department of the Interior Research and Technologies for Oil Spill Prevention and Response Act of 2010, S. 3515, 111th Cong. (2010).

²⁰ See S. 3515.

²¹ *Id.*

²² Roger Parloff, *BP's Gulf Coast oil spill—a legal primer*, CNNMONEY, (June 6, 2010), http://money.cnn.com/2010/06/04/news/companies/bp_legal.fortune/index.htm (last visited Nov. 27, 2011).

²³ See *id.*

questioned whether BP's liability is limited to the seventy-five million dollar cap under the Oil Pollution Act of 1990; whether Transocean's monetary liability is limited to the value of its vessel; and exactly who should be able to recover damages from various administrative funds.²⁴

Cognizant of the public's rising frustration and confusion regarding liability, President Barack Obama forged an agreement with "BP Chairman Carl-Henric Svanberg to create a \$20 billion compensation fund for Gulf spill victims."²⁵ At the time, the fund was viewed as an efficient means of dispensing BP money to aggrieved parties and avoiding the protracted litigation that characterized the *Exxon Valdez* spill.²⁶

While it remains too early to judge the benefits of the BP compensation fund, many remain unenthused. Rhon Jones, an Alabama toxic torts attorney, maintains, "My belief is that it has been set up to save BP money by forcing claimants to make an upfront election of lump-sum payments in return for a full and final release of all claims against BP."²⁷ Zygmunt J.B. Plater, the former chair of the Alaska Oil Spill Commission, voiced his own uncertainties with the legal repercussions of the BP compensation fund, stating, "This whole blowout is a game changer, and the agreement that Obama made with Svanberg is unprecedented."²⁸ Regardless, it is critical to establish the background and framework of the 1990 Oil Pollution Act to understand the legal ramifications of the Gulf spill.

II

THE 1990 OIL POLLUTION ACT

Prior to the *Exxon Valdez* spill in Prince William Sound off the Alaskan coastline, Congress remained unwilling or unable to establish a comprehensive regulatory scheme for oil spill cleanup and compensation.²⁹ Although several existing statutes provided partial

²⁴ *See id.*

²⁵ Kristin Choo, *The Price of Oil: Lawyers See Both Promise and Problems in \$20 Billion Gulf Coast Compensation Fund*, 96 A.B.A. J. 34, 36 (Aug. 2010).

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ Matthew Harrington, *Necessary and Proper, but Still Unconstitutional: The Oil Pollution Act's Delegation of Admiralty Power to the States*, 48 CASE W. RES. L. REV. 1, 4 (Fall 1997).

relief to oil spill victims,³⁰ the piecemeal nature of these protections rendered them largely ineffective.³¹ Specifically, the statutes failed to mandate “provision[s] for recovery of cleanup-costs by states or private parties.”³² Thus, parties damaged by oil spill pollution were forced to seek relief from a hodgepodge collection of state statutes, admiralty suits, or common law trespass or nuisance lawsuits.³³ Even though Congress was aware of the numerous enforcement inadequacies present in these statutes, it lacked the legislative will to enact wholesale changes.³⁴ As mentioned earlier, Congress was only spurred into action following several devastating oil spills in U.S. coastal waters.³⁵

Simply put, the principal purpose of the Oil Pollution Act (OPA) is to hold the oil industry accountable for oil spills.³⁶ To do so, Congress (1) increased polluter liability for cleanup and damages, (2) established the Oil Spill Liability Trust Fund and enlarged the role of the federal government in overseeing cleanup operations, (3) mandated scientific development for pollution prevention, and (4) allowed states to increase oil spill liability beyond the proposed limits contained in the OPA.³⁷

The OPA increased polluter liability through several measures. First, it imposed strict liability for cleanup costs and damages resulting from spills while also enlarging the class of people who

³⁰ See *id.* at nn.4–9 and accompanying text.

³¹ *Id.* at 1, 4–5 (discussing the effectiveness of Rivers and Harbors Act of 1899, the Oil Pollution Act of 1924, the Clean Water Restoration Act of 1966, the Water Improvement Act of 1970, and the Clean Water Act).

³² *Id.* at 5.

³³ See generally Stephen E. Roady, *Remedies in Admiralty for Oil Pollution*, 5 FLA. ST. U. L. REV. 361 (1977) (explaining how private claimants, in the absence of a state created cause of action or a direct suit against the polluters' insurers, are frequently frustrated in their hopes of recovery for damages resulting from spills); see also *Firemen's Fund Ins. Co. v. Standard Oil Co.*, 339 F.2d 148 (9th Cir. 1964) (upholding a trial court judgment that the City of Los Angeles and others were liable for negligent operation of an oil pipeline).

³⁴ See Walter B. Jones, *Oil Spill Compensation and Liability Legislation: When Good Things Don't Happen to Good Bills*, 19 ENVTL. L. REP. 10333 (1989) (providing a historical account of three decades of inadequate oil spill legislation); see generally Roady, *supra* note 33; and Thomas J. Wagner, *Recoverable Damages Under the Oil Pollution Act of 1990*, 5 U.S.F. MAR. L.J. 283 (1993) (describing how the Exxon Valdez disaster pushed Congress to unanimously enact OPA).

³⁵ Randle, *supra* note 15, at 10121, 10133.

³⁶ *Id.* at 10120.

³⁷ *Id.*

were eligible for recompense.³⁸ However, the OPA also limited polluters' liability in several key areas to avoid driving out oil producers. For example, the liability of vessels carrying over 3,000 gross registered tons is restricted to ten million dollars for removal costs and damage payments.³⁹ Critically, the OPA enforces absolute liability when the spill occurs due to the "willful negligence or willful misconduct" of the responsible party, which includes contractors or vessel lessees.⁴⁰ Furthermore, the OPA liability cap is lifted if the offending party, while in breach of a federal regulation, proximately causes the oil spill.⁴¹ The complete defenses for such spills are also quite minimal, including "(1) an act of God, (2) an act of war, or (3) an act or omission of a third party, not including an agent, servant, employee, or contractor."⁴²

Second, the OPA supersedes all existing compensation funds and combines them into the Oil Spill Liability Trust Fund (OSLTF). Thus, the Act encourages the quick and effective distribution of funds to expedite cleanup efforts.⁴³ Third, the OPA forces the federal government to "coordinate and direct all public and private cleanup efforts whenever there is a substantial threat of a pollution hazard to the public health or welfare."⁴⁴ Finally, the Act attempts to reduce oil spills and improve the response efforts of the federal government by requiring double-hulled vessels for large oil tankers, mandating

³⁸ Vincent J. Foley, *Post-Deepwater Horizon: The Changing Landscape of Liability for Oil Pollution in the United States*, 74 ALB. L. REV. 515, n.30, 525 (2010–2011). The OPA has been interpreted to provide for strict liability because it charges "each responsible party for a vessel or a facility from which oil is discharged, or which poses the substantial threat of a discharge of oil, into or upon the navigable waters or adjoining shorelines or the exclusive economic zone [as] liable for the removal costs and damages. . . ." 33 U.S.C. § 2702(a) (1996).

But see Andrew B. Davis, *Pure Economic Loss Claims Under the Oil Protection Act: Combining Policy and Congressional Intent*, 45 COLUM. J.L. SOC. PROBS. 1, 23–25 (2011) (discussing ambiguities in legislative history).

³⁹ Randle, *supra* note 15, at 10123. For example, a 300,000-ton tanker would have a liability limit of \$360 million ($\$1,200 \times 300,000 = \$360,000,000$), while a non-tank vessel of 20,000 tons, such as a grain vessel or container ship, would have a limit of twelve million dollars ($\$600 \times 20,000 = \$12,000,000$). Non-tank vessels have lower limits of liability because they pose less of a danger of a catastrophic spill. *See also* 33 U.S.C. § 2704(a)(2) (1996).

⁴⁰ 33 U.S.C. § 1321(g) (1994).

⁴¹ *See* 33 U.S.C. § 2704(c)(1)(B) (1996).

⁴² Harrington, *supra* note 16, at 11 (referencing 33 U.S.C. § 2703(a)(1)–(3) (1996)).

⁴³ *See* Oil Pollution Act of 1990, 33 U.S.C.A. § 1321(i) (1990).

⁴⁴ S. Rep. No. 101-94, at 8 (1989) (reprinted in 1990 U.S.C.C.A.N. 722, 729).

innovation and improvements in oil spill response technology, and revising pilotage laws.⁴⁵

But what has the OPA accomplished? In 1999, Admiral James M. Loy of the United States Coast Guard highlighted several safety improvements before Congress, including: (1) a two-thirds decline in the number of spills over 10,000 gallons, (2) a sixty-four percent drop in the rate of oil spills per million gallons of oil shipped, and (3) no single spills of over one million gallons in U.S. waters.⁴⁶ While these numbers are certainly impressive and indicate that the OPA has succeeded to some extent, the National Research Council, a nonprofit policy institute,⁴⁷ tellingly foretold that “a single major spill would dramatically affect the statistics and significantly alter the trends portrayed by the Coast Guard.”⁴⁸ Of course, such a spill did occur and subsequently shattered the safety record so feted by the Coast Guard. Paradoxically, the positive decline of U.S. oil spills over the last fifteen years has also lowered our readiness to respond to such incidents.⁴⁹ In 2004, the United States Coast Guard conducted a Spill of National Significance (SONS) exercise and damningly concluded:

Oil spill response personnel did not appear to have even a basic knowledge of the equipment required to support salvage or spill cleanup operations There was a shortage of personnel with experience to fill key positions. Many middle-level spill management staff had never worked a large spill and some had never been involved in an exercise. As a result, some issues and complex processes unique to spill response were not effectively addressed.⁵⁰

⁴⁵ See 33 U.S.C.A. § 2734 (1994); see also Oil Pollution Act of 1990, 46 U.S.C. § 9302(b) (1994).

⁴⁶ See *Oil Pollution Act of 1990: Joint Hearing Before the Subcomm. on Coast Guard and Maritime Transp. and Water Resources and Env't of the H. Comm. on Transp. and Infrastructure*, 106th Cong. 26–28 (1999) (Statement of Admiral James M. Loy, Commandant, U.S. Coast Guard).

⁴⁷ See NATIONAL RESEARCH COUNCIL, <http://www.nationalacademies.org/index.html> (last visited Nov. 11, 2011).

⁴⁸ Lawrence I. Kiern, *Liability, Compensation, and Financial Responsibility Under the Oil Pollution Act of 1990: A Review of the First Decade*, 24 TUL. MAR. L.J. 481, 488 (2000).

⁴⁹ JONATHAN L. RAMSEUR, OIL SPILLS IN U.S. COASTAL WATERS: BACKGROUND, GOVERNANCE, AND ISSUES FOR CONGRESS 28 (2010).

⁵⁰ *Id.* (citing U.S. Department of Homeland Security, U.S. Coast Guard, *California SONS 2004: After Action Report* 46 (Sept. 2004)).

Perhaps the most worrisome failure of the OPA is the low level of funding for the OSLTF.⁵¹ When Congress created the OSLTF in 1986,⁵² it failed to allocate funding until the *Exxon Valdez* spill spurred it into action.⁵³ The OSLTF is financed partially through an eight or nine cent per barrel tax on the United States oil industry,⁵⁴ but this provision expired in December of 1994 and was not reenacted until April 2005. Unsurprisingly, according to a 2010 Congressional Research Service report, the OSLTF “the risk of a major oil spill remains.”⁵⁵ Another bad tidings for the future safety of the oil industry that emphasizes the need for comprehensive regulatory reform was illustrated in a 2007 U.S. Department of Homeland Security report that stated:

[T]he vast oil production industry infrastructure is aging, including oil wells, refineries, leaking underground storage tanks, and pipelines. A great number of oil wells that were drilled (onshore and offshore) have been depleted and are now abandoned, most with no identifiable responsible party. Many of these pollution sites are 20 to 50 years old—pre-dating current state regulatory programs—and have not been properly maintained.⁵⁶

Thus, because tanker liability is limited by the size of its oil holdings,⁵⁷ a spill of similar size to the *Exxon Valdez* has the real capacity to exceed the value of the fund.⁵⁸ Of course the twenty billion dollar BP fund has, to some extent, circumvented this particular issue.⁵⁹

Therefore, the OPA of 1990 remains an imperfect instrument—one that should be consistently updated as environmental concerns increase, technology advances, and U.S. oil supply and demand fluctuates. Although Congress remained relatively content with their

⁵¹ *Id.* at 19.

⁵² 26 U.S.C. § 9509 (1986).

⁵³ RAMSEUR, *supra* note 49, at 13.

⁵⁴ 26 U.S.C. § 9509; *see also* Ramseur, *supra* note 49, at 19.

⁵⁵ RAMSEUR, *supra* note 49, at 20–21.

⁵⁶ U.S. DEPARTMENT OF HOMELAND SECURITY, UNITED STATES COAST GUARD, REPORT ON IMPLEMENTATION OF THE OIL POLLUTION ACT OF 1990 10 (2007).

⁵⁷ RAMSEUR, *supra* note 49, at 20–21.

⁵⁸ *Id.*

⁵⁹ *See* Choo, *supra* note 25; *but see* Moira Herbst, *BP Fund, Feinberg Face Lawsuits by Claimants*, REUTERS (Feb. 28, 2011), available at <http://www.reuters.com/article/2011/02/28/us-oil-spill-feinberg-idUSTRE71R7JH20110228> (detailing allegations that Kenneth Feinberg, the administrator of the BP compensation fund, has systematically sought to “delay, deny, [and] defend” claims in order to force injured parties into “grossly inadequate” settlements).

1990 OPA efforts for over a decade, a few recent provisions have attempted to address the aforementioned liability and safety concerns.⁶⁰

As mentioned earlier, Congress renewed the five-cent-per-barrel tax on all U.S. oil in 2005 and, more importantly, increased the OSLTF budget to \$2.7 billion.⁶¹ In 2007, Senate Bill 184 mandated increased pipeline inspections, H.R. 2830 reduced the time period for which OSLTF claims could be submitted from six to three years, and Senate Bill 1620 required some oil carriers to demonstrate their financial capacity to pay for prospective spills.⁶² As of yet, none of these bills have passed muster in either the House or Senate. Thus, while Congress seems to be aware of many of the limitations of the 1990 OPA, it lacks the political will to enact helpful changes. This Congressional malaise highlights the problems surrounding effective oil spill reform and emphasizes the need for a creative administrative approach that avoids the boondoggling of politicians.

III

THE DANGERS OF OFFSHORE OIL EXTRACTION OPERATIONS

Interestingly, spills from oil extraction operations such as the *Deepwater Horizon* only account for approximately one percent of the total oil spillage per year in North American coastal waters.⁶³ However, while well blowouts occur infrequently, when they do occur they typically spew millions of gallons of oil into fragile ecosystems.⁶⁴ The overwhelming majority of these spills take place in the ecologically fragile Gulf of Mexico.⁶⁵ Furthermore, the National Research Council, a scientific consortium that studies environmental issues, “estimates that oil spills from operations in state waters

⁶⁰ RAMSEUR, *supra* note 49, at 10–12.

⁶¹ See Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594. Once the \$2.7 billion cap on the OSLTF fund is reached, the tax ceases until the fund needs to be replenished.

⁶² See RAMSEUR, *supra* note 49, at 14–15.

⁶³ *Id.* at 29 (utilizing data from NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS. OF SCI., OIL IN THE SEA III: INPUTS, FATES, AND EFFECTS 69 (The National Academies Press 2003)).

⁶⁴ *Id.* at 32.

⁶⁵ *Spills, Statistics, and Summaries 1996–2011*, BUREAU OF OCEAN ENERGY MGMT., REGULATION AND ENFORCEMENT, <http://www.boemre.gov/incidents/spills1996-2011.htm> (last visited Nov. 27, 2011).

account for twice the oil discharges of activities in federal waters.”⁶⁶ While some states have wholeheartedly embraced the preemption clause of the OPA and enacted more stringent guidelines than those contained in federal legislation,⁶⁷ the high number of state water incidents presents a great hazard to businesses and ecologies clustered along the coast.⁶⁸

IV

CURRENT LEGISLATIVE EFFORTS

Since the *Deepwater Horizon* spill in April of 2010, both the House and Senate have been under pressure to respond to the disaster.⁶⁹ As a result, several bills are currently in various states of Congressional approval. First, on July 30, 2010, the House passed the Consolidated Land, Energy and Aquatic Resources Act (CLEAR), which “would add restrictions on offshore drilling and beef up response safety and liability provisions in current law.”⁷⁰ The Senate has also drafted a similar bill, the Clean Energy Jobs and Oil Company Accountability Act of 2010,⁷¹ which indicates that both parties may be willing to compromise and send a united bill to President Obama after the August recess.⁷² The Senate bill, drafted by Majority Leader Harry Reid, includes four major proposals: (1) elimination of the seventy-five million dollar liability cap for economic damages, (2) incentives for natural gas and electric

⁶⁶ RAMSEUR, *supra* note 49, at 33 (referencing NAT'L. RESEARCH COUNCIL OF THE NAT'L ACADS., *supra* note 63, 38).

⁶⁷ 1999: *Fewer Spills, But in the Wrong Places at the Wrong Times*, OIL SPILL INTELLIGENCE REP. (Cutter Info Corp., Arlington, Mass.), Jan. 13, 2000, at 1. (noting that Washington, California, and Maine have created their own guidelines for oil spill liability and tanker safety).

⁶⁸ RAMSEUR, *supra* note 49, at 6–7.

⁶⁹ Svend Brandt-Erichsen & Adam Orford, *House Enacts Amendments to Oil Pollution Act, Outer Continental Shelf Lands Act; Measure Awaits Senate Action*, MARTEN LAW, <http://www.martenlaw.com/newsletter/20100802-house-enacts-amendments> (last visited Nov. 27, 2010).

⁷⁰ S. Res. 3663, 111th Cong. (2nd Sess. 2010).

⁷¹ *Id.*

⁷² See generally Brandt-Erichsen & Orford, *supra* note 69; but see *infra* text accompanying notes 75–79.

vehicles, (3) implementation of the Home Star Retrofit Act of 2010,⁷³ and (4) reforms to the Land and Water Conservation Fund.⁷⁴

Both bills have the potential to bring about major changes in oil spill liability and safety. However, significant opposition has arisen to the unlimited liability provisions of the Senate bill,⁷⁵ prompting counterproposals that would require each offshore lease holder “to carry insurance to a level determined by the Secretary of Interior through a public rulemaking process, subject to a minimum of \$250 million,” amongst other provisions.⁷⁶ Of course, any legislative action would have to pass both the House and the Senate, a result that seems more and more unlikely considering the recent Republican takeover of the House.⁷⁷ Williams & Jensen, PLLC, a leading District of Columbia law firm that specializes in lobbying,⁷⁸ recently concluded that bipartisan legislative action regarding the BP oil spill was “not probable” in 2011.⁷⁹

Unfortunately, most political efforts aimed at reforming the technological and regulatory nature of the offshore oil drilling industry remain inexorably tied to spill liability reform, effectively handcuffing the passage of comprehensive legislation. Therefore, to truly improve the safety and technological prowess of the American offshore oil industry, a fresh approach is imperative.

V

MINERALS MANAGEMENT SERVICE: THE HISTORY AND FAILINGS OF A CONFLICTED AGENCY

The first significant federal touchstone for regulating offshore production of American hydrocarbons was laid with the passage of

⁷³ EFFICIENCY FIRST: AMERICA'S HOME PERFORMANCE WORKFORCE, <http://www.encyfirst.org/home-star/> (last visited Nov. 27, 2011) (describing a rider amendment to 2010 S. 3663, which would incentivize improvements in residential efficiency).

⁷⁴ Memorandum from Frank Vlossak, Williams & Jensen, PLLC, *Oil Spill Legislation: Prior Action and Outlook* 1, 1 (Dec. 2, 2010) (on file with author).

⁷⁵ *Id.* at 2 (referring to Senator Mark Begich's (D-AK) proposal on oil spill liability).

⁷⁶ Press Release, Mark Begich, Begich Proposes Oil Spill Shared Liability Bill (Aug. 6, 2010), available at <http://begich.senate.gov/public/index.cfm/2010/8/begich-proposes-oil-spill-shared-liability-bill>.

⁷⁷ Vlossak, *supra* note 74, at 2.

⁷⁸ See generally WILLIAMS & JENSEN, <http://www.williamsandjensen.com/?flash=false> (last visited Nov. 27, 2011).

⁷⁹ Vlossak, *supra* note 74, at 1.

the Outer Continental Shelf Lands Act of 1953.⁸⁰ This legislation, which was to be subsequently developed and refined throughout the years, gave the federal government and the Department of the Interior control of submerged land three miles off the U.S. coastline.⁸¹ However, even as federal control over offshore development expanded, so too did its environmental responsibilities.⁸² The primary vehicle for environmental legislation took form in the National Environmental Policy Act (NEPA), which was signed into law on January 1, 1970.⁸³ NEPA “established a national policy to protect the environment, created a Council on Environmental Quality (CEQ), and required that environmental impact statements be prepared for major federal actions having a significant effect on the environment.”⁸⁴

Although environmentalists could be pleased with their efforts in attaining the passage of NEPA, the oil embargo of the early 1970s heralded another shift in American energy policy.⁸⁵ As advocates for American energy independence pushed for greater exploration and use of offshore resources, “many coastal states, local governments, fishermen, and environmentalists—sought . . . to ensure that offshore oil and gas leasing complied with strict safeguards”⁸⁶ Thus, the federal government was left with two competing mandates: (1) utilize the vast profit potential of offshore submerged lands to achieve

⁸⁰ NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, *DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING* 57 (2011) [hereinafter *DEEP WATER*] (citing Outer Continental Shelf Lands Act, 42 U.S.C. §§ 1331–1356a).

⁸¹ *Id.* The passage of this bill was an extraordinary development for federal control of the submerged continental shelf. *Deep Water* details how many states bitterly contested federal control of offshore land. *See also* *United States v. California*, 332 U.S. 19 (1947); *United States v. Louisiana*, 339 U.S. 699 (1950); *United States v. Texas*, 339 U.S. 707 (1950). Indeed, the presidential candidates of the day debated the issue at length. *See DEEP WATER*, *supra* note 80, at 57–58.

⁸² *See DEEP WATER*, *supra* note 80, at 59 (citing National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370H; *see also* RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW*, 70 (2004) (listing eighteen statutes concerning environmental regulations)). Unsurprisingly, legislative calls for heightened environmental regulations came about, at least in part, as a reaction to the Santa Barbara Channel oil spill on January 28, 1969. *See DEEP WATER*, *supra* note 80, at 58–59.

⁸³ Alvin L. Alm, *NEPA: Past, Present, Future*, U.S. ENVIRONMENTAL PROTECTION AGENCY, (Jun. 8, 2011) <http://epa.gov/aboutepa/history/topics/nepa/01.html>.

⁸⁴ *Id.*

⁸⁵ The 1973 oil embargo prompted President Richard Nixon to propose “a dramatic expansion of offshore oil and gas development, including in frontier areas around most of the nation’s coast.” *See DEEP WATER*, *supra* note 80, at 59.

⁸⁶ *Id.* at 60.

energy independence, and (2) maintain the environmental purity of American water and air resources for future generations.

In 1978, these two divergent policy goals were actualized in the Outer Continental Shelf Lands Act Amendments.⁸⁷ The amended Act of 1978 “fundamentally transformed federal offshore leasing” by detailing the “procedures governing the leasing of rights to explore, develop, and produce the resources of the outer continental shelf.”⁸⁸ Simultaneously, the Act required the Secretary to both undertake “environmental studies” to determine the impact of offshore hydrocarbon development and to “obtain a proper balance between the potential for environmental damage, the potential for discovery of oil and gas, and the potential for adverse impact on the coastal zone.”⁸⁹

Interestingly, the amended Act also required developers to incorporate “the use of the best available and safest technologies which the Secretary [of the Interior] determines to be economically feasible, wherever failure of equipment would have a significant effect on safety, health, or the environment.”⁹⁰ Critically, these regulations *could be ignored* so long as the Secretary of the Interior determined that the safety improvements they brought were insufficient to justify costs of implementing the technology.⁹¹ This special exemption would later come to have implications for every single offshore drilling operation in American coastal waters.

As the federal government began to taste the rich fruits that offshore leasing could bring,⁹² it sought to streamline and enhance the notoriously inefficient royalty collection process.⁹³ Thus, in 1982,

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ Outer Continental Shelf Lands Act Amendments of 1978, Pub. L. No. 95-372, § 208-18(3)-(4)(b)(3), 92 Stat. 629 (1978) (amended 1978); 43 U.S.C.A.1331 (1954) (West 2011).

⁹⁰ DEEP WATER, *supra* note 80, at 62 (quoting interview with Coast Guard official Nov. 12, 2010).

⁹¹ *Id.* (citing 43 U.S.C. §1347(b) (2007)).

⁹² A 1980 lease sale in New Orleans netted almost three billion dollars in cash for federal government coffers, and also demonstrated a viable method of raising money without raising taxes. At this point, revenues from oil and gas royalties “had already become the second largest revenue source for the U.S. Treasury.” *See* DEEP WATER, *supra* note 80, at 63.

⁹³ *Id.* at 63-64.

Congress passed the Federal Oil and Gas Royalty Management Act.⁹⁴ This Act required the Secretary of the Interior to “establish a comprehensive inspection, collection and fiscal and production accounting and auditing system” to determine and collect royalties from oil and gas extraction operations on federal lands.⁹⁵ Furthermore, the Act called upon the Secretary to establish inspection procedures for the extraction sites to ensure that the relevant federal rules and regulations were upheld.⁹⁶

On January 19, 1982, Secretary of the Interior Watt created the Minerals Management Service (MMS).⁹⁷ The MMS was organized into two branches: (1) the Offshore Energy and Minerals Management Program, which was responsible for regulating offshore drilling, and (2) the Minerals Revenue Management program, which was responsible for revenue collection from offshore leasing activities.⁹⁸ For the first time, a single agency was responsible for regulating offshore leases and collecting the revenue that such leases generated. The seeds of the BP disaster were sown.

Following passage of the Amended Outer Continental Shelf Lands Act, Secretary Watt swiftly set about expanding offshore leasing operations and attempted to open up nearly one billion acres on the outer continental shelf for development.⁹⁹ Furthermore, the special exemption, which had been utilized mainly in the Gulf of Mexico, “gradually became a policy of allowing offshore drilling, as a practical matter, almost *only* in the Gulf.”¹⁰⁰

⁹⁴ Federal Oil and Gas Royalty Management Act of 1982, Pub. L. No. 97-451, 96 Stat. 2447 97th Cong. (2nd Sess.), *available at* http://www.onrr.gov/Laws_R_D/PubLaws/PDFDocs/97-451.pdf (last visited Nov. 27, 2011).

⁹⁵ Oil and Gas Royalty Management Act, 30 U.S.C. § 1711 (2009), *available at* http://www.law.cornell.edu/uscode/30/usc_sec_30_00001711----000-.html (last visited Nov. 27, 2011).

⁹⁶ *Id.*

⁹⁷ BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT, HISTORY OF THE MMS, <http://www.boemre.gov/jobs/Assets/PDF/MMSOverview.pdf> (last visited Nov. 27, 2011).

⁹⁸ *See* DEEP WATER, *supra* note 80, at 65.

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 66. Proposed drilling leases off the Californian, Oregonian, and Alaskan coasts have been met with fierce opposition and lawsuits throughout the years, which increased the popularity, and use of the special exemption, in the Gulf of Mexico. *Id.* at 63; *see also* TYLER PRIEST, THE OFFSHORE IMPERATIVE: SHELL OIL’S SEARCH FOR PETROLEUM IN POST WAR AMERICA, 220–21 (Joseph A. Pratt ed., Texas A&M University Press 2007).

Throughout the 1980s, a series of deadly accidents rocked the international offshore drilling industry.¹⁰¹ These accidents prompted large-scale changes in the regulatory structure of the United Kingdom and Norway (as will be detailed later in this Comment) and also prompted the MMS to review its own regulations.¹⁰² In 1989, the agency commissioned a task force to review its regulatory program, which concluded that “MMS’s emphasis on a list of ‘potential incidents of non-compliance’ could lead to an attitude on the part of an operator that compliance with the list equals safety, thereby diminishing ‘recognition of [the operator’s] primary responsibility for safety.’”¹⁰³ The task force urged the MMS to, amongst other things, upgrade its outdated inspection lists, focus on operational procedures and human error factors instead of hardware compliance, and increase facility inspections.¹⁰⁴

Regrettably, these recommendations were ignored as the *Exxon Valdez* disaster had already captivated the focus of the nation and its legislators.¹⁰⁵ Undeterred, the MMS pushed forward and even attempted to implement its own version of the safety case,¹⁰⁶ dubbed the safety and environmental management program. Unfortunately, industry opposition and agency malaise combined to leave these proposals dead in the water.¹⁰⁷ Instead of effective regulatory reform, the federal government saddled the MMS with even greater duties¹⁰⁸ without the concomitant rise in funding that its responsibilities demanded.¹⁰⁹

Throughout the 1990s, the MMS’s authority and efficiency, as a regulatory agency, were continually weakened through a combination of a lack of funding, increasing responsibilities, and a siphoning of

¹⁰¹ DEEP WATER, *supra* note 80, at 68–69 (referencing the *Ocean Ranger* disaster in Newfoundland, the sinking of the *Alexander Kielland* in the North Sea, and the Piper Alpha explosion in Scotland).

¹⁰² *Id.* The MMS was also pushed to review its own procedures following a platform explosion off the Louisiana coast on March 19, 1989, which resulted in the loss of seven lives.

¹⁰³ *Id.* at 70. (citing MARINE BOARD, ALTERNATIVES FOR INSPECTING OUTER CONTINENTAL SHELF OPERATIONS 80 (1990)).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 70–71.

¹⁰⁷ DEEP WATER, *supra* note 80, at 71.

¹⁰⁸ Following passage of the OPA, the MMS’s responsibilities were expanded to include “oil spill response planning and prevention.” *Id.* at 70–74.

¹⁰⁹ *Id.* at 72–73.

decision-making ability.¹¹⁰ Instead of working as a regulator of the offshore oil industry, it sought to “approach [its] relationship with the offshore industry more as a partner than a policeman.”¹¹¹ Furthermore, the MMS failed to update its safety requirements to account for the major technological innovations that had enabled producers to expand their operations further away from land or the expanding use of contractors by oil companies.¹¹² In sum, the MMS had been weakened and captured by the very industry it sought to regulate.

On April 20, 2010, two decades of inadequate funding, legislative inattention, and technological stagnation were exposed with catastrophic results. In hindsight, the jaded observer will not question why the *Deepwater Horizon* disaster occurred, but rather why it did not occur sooner. To truly learn and improve from these harsh lessons, a completely fresh regulatory approach is required.

VI

PRESCRIPTIVE VS. PERFORMANCE-BASED REGULATION

In July of 1988, the United Kingdom offshore oil-drilling industry was rocked by an explosion and subsequent fire onboard the Piper Alpha platform, located over 100 miles off the northeast coastline of Scotland.¹¹³ In the aftermath of the disaster, the British government ordered an inquiry into the reasons for the conflagration.¹¹⁴ Interestingly, instead of mandating increased government regulations, Lord Cullen (the chair of the inquiry) concluded:

Many existing regulations are unduly restrictive in that they are of the type which impose “solutions” rather than “objectives” and are out of date in relation to technological advances. This poses a clear danger that compliance takes precedence over wider safety considerations; and that sound innovations are discouraged.¹¹⁵

¹¹⁰ *Id.* at 70–74.

¹¹¹ DEEP WATER, *supra* note 80, at 71–72.

¹¹² *Id.* at 73–74.

¹¹³ British Broadcasting Company, 1988: *Piper Alpha Oil Rig Ablaze*, BBC ON THIS DAY, http://news.bbc.co.uk/onthisday/hi/dates/stories/july/6/newsid_3017000/3017294.stm (last visited Nov. 27, 2011).

¹¹⁴ Rob Grant et al., *Potential for Performance-Based Regulation in the Canadian Offshore Oil and Gas Industry*, 44 ALBERTA L. REV. 1, 4 (2006) (referencing U.K., Department of Energy, *The Public Inquiry into the Piper Alpha Disaster*).

¹¹⁵ U.K., DEPARTMENT OF ENERGY, THE PUBLIC INQUIRY INTO THE PIPER ALPHA DISASTER (Chair: Lord Cullen) (London: Her Majesty’s Stationery Office, 1990) [Cullen Report], at para. 21.

Thus, while the Cullen Report did spur the British government to provide its offshore oil drilling regulatory organization with new powers,¹¹⁶ it also directed it to utilize performance-based regulations instead of prescriptive guidelines.¹¹⁷

But what exactly is the difference between prescriptive and performance-based regulations? Well, prescriptive regulations are those that “specifically describe the *means* to achieve the objective. Establishments must all meet the regulatory requirement in the same way. The government [then] verifies information from regulated establishments and conducts compliance inspections.”¹¹⁸

In contrast, performance-based regulation “sets performance goals, and allows individuals and firms to choose how to meet them.”¹¹⁹ Under this approach, “the implementation of [performance-based regulation] has the potential to facilitate technological innovation and efficient use of resources, [and] increase industry initiative in developing and implementing plans of action and self-audits”¹²⁰ Most importantly, performance-based regulations enable the organizations with the best access to the latest technology—in this case the oil companies—to implement industry safeguards while still maintaining regular production standards.

In contrast, a prescriptive regulatory regime is forced to continually update itself with safety innovations and technological improvements, all the while lacking the technical nous that accompanies daily operation of an oil rig. Of course, charging offshore oil producers with the responsibility of setting and maintaining their own safety standards involves a significant amount of risk, both environmentally and politically. Thus, a mixed prescriptive/performance-based regime stands the best chance to simultaneously improve safety, spur technological development, and avoid the piecemeal and ineffective

¹¹⁶ See *Offshore Safety Act, 1992*, 15 (U.K.) available at <http://www.legislation.gov.uk/ukpga/1992/15/introduction>.

¹¹⁷ S. Nelson et al., *How the World's Most Comprehensive Goal-Setting Regulatory Regime Works: A Model of the UKCS Regulatory System and its Unique Implications for MODUS* (Paper presented at the SPE/IADC Drilling Conference, Amsterdam, 4–6 March 1997), Society of Petroleum Engineers publication SPE/IADC 37686, at 921.

¹¹⁸ *Drugs and Health Products Glossary*, HEALTH CANADA, <http://www.hc-sc.gc.ca/dhp-mpps/consultation/blood-sang/gloss-eng.php> (last visited Nov. 9, 2011).

¹¹⁹ CARY COGLIANESE ET AL., REGULATORY POLICY PROGRAM REPORT NO. RPP-03, PERFORMANCE-BASED REGULATION: PROSPECTS AND LIMITATIONS IN HEALTH, SAFETY, AND ENVIRONMENTAL PROTECTION 1 (2002), available at <http://web.hks.harvard.edu/publications/getfile.aspx?ID=63>.

¹²⁰ See Grant et al., *supra* note 114, at 3.

legislative boondoggle that currently characterizes American efforts to regulate its offshore oil industry.

VII THE BRITISH REGULATORY REGIME

As mentioned earlier, the British government implemented its current offshore oil regulatory scheme in response to the Piper Alpha disaster of 1988.¹²¹ The centerpiece of Lord Cullen's recommendations, which now serves as the backbone of British offshore oil safety regulations, is the "Safety Case."¹²² Taken literally, each oil producer is required to prove the safety of its proposed installation to the Health and Safety Executive, specifically detailing the following:

[T]hat [1] an adequate Safety Management System (SMS) be in place, such that the design and the operation of the installation and its equipment were safe; that [2] the potential major hazards of the installation and the risks to personnel thereon be identified and appropriate controls provided; and that [3] a Temporary Safe Refuge (TSR) and means for a full and safe evacuation, escape, and rescue be provided.¹²³

Furthermore, each installation operator must renew its safety case every three years or, alternatively, when its extraction operation undergoes a substantial change.¹²⁴ Two terms are critical to the legal enforcement of the safety case: "reasonable practicability" and "as low as reasonably practicable" (ALARP).¹²⁵ "Reasonable practicability" requires oil operators to balance the "degree of risk" for operating individual installations with the costs of maintaining a high level of safety.¹²⁶ More importantly, "an [oil operator's] ability to afford the measures is not considered relevant . . . the burden of proof in the courts for [proving] reasonable practicability is on the [oil

¹²¹ See BRITISH BROADCASTING COMPANY, *supra* note 113, at 1; see also Grant et al., *supra* note 114, at 4.

¹²² See Grant et al., *supra* note 114, at 6.

¹²³ *Id.* at 5; see also Kenneth Miller, *Piper Alpha and the Cullen Report*, 20 IND. L.J. 176, 183 (1991).

¹²⁴ See Grant et al., *supra* note 114, at 7 (citing S.I. 1992/2885 [OSCR]).

¹²⁵ *Id.* at 6.

¹²⁶ *Id.* (citing Anne Sharp, *Regulating Higher Hazards: Exploring the issues* (PowerPoint presentation and transcript from the Workshop on Prescriptive vs. Performance-based Regulatory Regimes for the Canadian Off-Shore Petroleum Industry at the Oil and Gas Administration Advisory Council Conference (OGAAC), St. John's, Newfoundland 1, 16-17 (Oct. 2000)).

operator], not on the prosecuting of authorities.”¹²⁷ Second, ALARP simply refers to the acceptable level of risk that each oil extractor must achieve.¹²⁸

These vast regulatory changes did not come without a financial cost, of course. Because oil extractors were now burdened with conducting advanced risk assessment studies to establish their safety case, they had to expend significant capital on hiring independent safety consulting firms.¹²⁹ Furthermore, additional costs were accrued when installations were forced to comply with the ALARP principle. All in all, the British oil industry has spent approximately eight billion dollars on safety innovation and renovation since the Piper Alpha disaster.¹³⁰ More importantly, the British regulatory system has achieved a high level of operational safety and has maintained the production standards of its industry operators.¹³¹

VIII

THE NORWEGIAN REGULATORY REGIME

Unlike the United States and the United Kingdom, Norway's shift towards a performance-based regulatory regime did not occur as the result of a single offshore accident. Rather, as industry activity began seriously ramping up in the mid-1970s, the Norwegian government found that it was unable to sufficiently monitor oil producers.¹³² Consequently, the Norwegian parliament “gradually changed the profile of the supervisory function towards an increased focus on the internal control systems in the licensees' organizations.”¹³³

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.* at 8.

¹³⁰ *Id.* at 6.

¹³¹ See *Statistics*, HEALTH AND SAFETY EXECUTIVE, <http://www.hse.gov.uk/offshore/statistics.htm> (last visited Nov. 27, 2011).

¹³² Magne Ognedal, *The Goal-Setting Approach to Regulatory Supervision: The Experience of a Safety and Working Environment Regulator*, Workshop on Prescriptive vs. Performance-based Regulatory Regimes for the Canadian Offshore Petroleum Industry at the Oil and Gas Administration Advisory Council Conference, St. John's, Newfoundland, 16–17 (Oct. 2000) (on file with author); see also Thor Gunnar Dahle, *The Norwegian Approach to Safety in the Offshore Petroleum Activity*, 7 J. LOSS PREVENTION PROCESS INDUSTRIES 379, 379 (1994), available at <http://www.sciencedirect.com/science/article/pii/0950423094800537>.

¹³³ NATIONAL INSTITUTE OF STANDARDS TECHNOLOGY, *Composite Materials for Offshore Operations: Proceedings of the First International Workshop*, (Oct. 1993), <http://www.boemre.gov/tarprojects/185/185AA.pdf>.

Essentially, the Norwegian Petroleum Directorate, the main oil regulatory agency, “became more concerned about how decisions with impact on safety and working conditions were taken, and less concerned about what the decisions actually were.”¹³⁴ While the Norwegian regulatory system did not fully embrace a performance-based approach overnight, it now utilizes an installation approval scheme comparable to the British model that is commonly called “risk analysis.”¹³⁵

In the Norwegian system, the government establishes industry wide safety goals, and each operator must conduct a risk analysis on his installation to determine how to achieve and maintain these standards over the long term.¹³⁶ The operator then submits his risk analysis to the government, and must demonstrate that “safety measures are adapted to the specific risks inherent to its activities and that they comply with the safety objectives contained in the safety regulations.”¹³⁷ In contrast to the now defunct American regulatory regime, in which one agency was responsible for maintaining offshore environmental standards and collecting revenue, the Norwegian system utilizes two independent agencies: the Norwegian Petroleum Directorate (NPD) and the State Pollution Control Authorities (SPCA).¹³⁸ These agencies collaborate to define and enforce Norwegian regulatory requirements, as directed by their parliament.¹³⁹

There are a few notable benefits to this approach. First, the risk analysis system recognizes that certain drilling operations are ecologically riskier than others and mandates the implementation of heightened safety measures to reduce this risk.¹⁴⁰ Thus, “the probability of having an accidental oil spill must be lower when drilling in an environmentally vulnerable area[,] [such as the Barents Sea,] to balance the fact that potential consequences of such events are more serious than in other areas.”¹⁴¹ Interestingly, NEPA also

¹³⁴ Dahle, *supra* note 132.

¹³⁵ U.A. Kjellen, *The New Risk Analysis Regulations From the Norwegian Petroleum Directorate: Their Applicability to the Control of Occupational Accidents in Design*, SOCIETY OF PETROLEUM ENGINEERS [SPE] 23277 at 644.

¹³⁶ Ingrid Arstad, *Regulations Concerning Risk Analysis and their Application in Environmental Safety Protection in Norway*, 29 MARINE POLLUTION BULL. 330, 331 (1994).

¹³⁷ *Id.*

¹³⁸ *Id.* at 330–31.

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 331.

¹⁴¹ *Id.* at 332.

requires companies to submit a “development and production plan” for approval by the Secretary of the Interior¹⁴² that details the “environmental safeguards to be implemented” for individual leases.¹⁴³ However, oil companies consistently bypass this safety provision by invoking the special Gulf of Mexico exemption, thus eliminating its potential effectiveness.¹⁴⁴

Second, the clear delineation of duties between the NPD and the SPCA has produced a streamlined system of regulatory promulgation and enforcement. In it, the NPD is largely responsible for regulating accidental oil pollution while the SPCA is responsible for regulating normal oil discharges and spill response efforts.¹⁴⁵ While these agencies are independent of each other and serve separate functions, their

co-operation enables [them] to cover an area of competence and experience that contributes to a more integral understanding of environmental challenges in petroleum activities, and, therefore, a better regulation of environmental protection and a more efficient supervision of the industry.¹⁴⁶

The NPD and SPCA’s clear delineation of regulatory responsibility contrasts starkly with the MMS’s impossibly broad range of duties. Quite frankly, the MMS was overwhelmed by its contradictory responsibilities for revenue collection and enforcement, impeded in its reform efforts by both the federal government and the oil industry,¹⁴⁷ and hampered in its safety reform efforts by its lack of technological nous.¹⁴⁸

While the Norwegian offshore oil regulatory system is certainly not perfect, its success in creating site-specific safety procedures is quite impressive. The risk analysis approach, which relies on the oil industry to incorporate advances in safety technology and risk

¹⁴² 43 U.S.C. § 1351 (1978).

¹⁴³ *Id.* at (c)(3).

¹⁴⁴ *See supra* text accompanying note 102.

¹⁴⁵ *See* Arstad, *supra* note 136, at 330–31.

¹⁴⁶ *Id.* at 333.

¹⁴⁷ Since the early 1990s, the American Petroleum Institute, a *de facto* lobbying arm of the American oil industry, has actively hampered the MMS’s efforts to adopt a risk based regulatory system. *See* DEEP WATER, *supra* note 80, at 71. The MMS has also faced periodic opposition from the federal government, leading one senior MMS official to liken the agency’s negotiations with the Office of Management and Budget as “pulling teeth.” *Id.* at 72 (*quoting* E.P. Danenberger, interview with Commission staff (Sept. 2, 2010); E.P. Danenberger, e-mail message to Commission staff (Oct. 25, 2010)).

¹⁴⁸ *See id.* at 73.

perception in their offshore operations, has fostered a cooperative yet mindful relationship between its oil producers and the agencies that regulate them. The American offshore regulatory system can and should implement a similar approach adapted to the unique ecology and hydrocarbon potential of the Gulf of Mexico.

IX CONCLUSION

The offshore oil industry is a critical element of America's domestic energy supply. Offshore oil and gas currently account for one-third of the United States' hydrocarbon production, a figure that will most likely increase in the coming years.¹⁴⁹ According to the Energy Information Administration, the outer continental shelf "contains an estimated 85 billion barrels of oil in technically recoverable resources—more than all onshore resources and those in shallower state waters combined."¹⁵⁰

The *Deepwater Horizon* disaster highlighted the dangers that accompany offshore extraction of hydrocarbons. The loss of life and the environmental destruction that occurred on April 20, 2010, will long live in both the ecology of the Gulf and the memory of the American public. For the time being though, oil remains a cornerstone of the American economy and the American way of life. Thus, legislators will continue to allow oil extraction on American land, and oil companies will continue to seek out and extract hydrocarbons wherever they may lie. The challenge, therefore, is creating a workable system of enforcement and risk management. While current efforts have failed, an efficient and effective regulatory regime remains eminently feasible.

This Comment details the extreme risks that the federal government assumed when it allowed the MMS to be captured by the very industry it was directed to regulate.¹⁵¹ The lack of technical expertise, adequate funding, and decision-making ability that afflicted the MMS necessitates a completely fresh approach to regulating the offshore oil industry. Although at least one scholar has written

¹⁴⁹ See Energy Information Administration, *Annual Energy Outlook 2010*, 75 (Apr. 2010), [http://www.eia.doe.gov/oiaf/aeo/pdf/0383\(2010\).pdf](http://www.eia.doe.gov/oiaf/aeo/pdf/0383(2010).pdf).

¹⁵⁰ DEEP WATER, *supra* note 80, at 294 (emphasis in original) (citing Energy Information Agency *Annual Energy Review 2008* (June 26, 2009), tbl.4.1, at 99, <http://www.eia.gov/FTP/ROOT/multifuel/038408.pdf>).

¹⁵¹ See *supra* Part V.

extensively regarding the regulatory potential of an independent advisory board,¹⁵² this author believes that the implementation of a performance-based regulatory regime provides the federal government with the most efficient and cost-effective method of preventing catastrophic spills.

Unfortunately, the inherently dangerous nature of the offshore drilling industry means that there is no surefire process of eliminating costly and deadly accidents. When deep-sea accidents do occur, the results can be particularly catastrophic. However, this inexorable fact should not deter policy makers from completely altering regulatory schemes that have been proven ineffective. The United Kingdom safety case and the Norwegian risk analysis approaches are established regulatory regimes that have succeeded in preventing large-scale disasters like the *Deepwater Horizon*. Furthermore, these regulatory regimes have effectively shifted the safety burden to the oil producers, maintaining a high level of technological expertise and fostering a culture of “safety first.”

Additionally, since performance-based regimes are so well established in offshore drilling operations around the world, “there is reasonable assurance that the major operators . . . would apply . . . the same skills and sophistication that they are accustomed to applying in the other jurisdictions, and with similarly satisfactory results.”¹⁵³ While compliance with such a regime in American waters might temporarily increase operational costs¹⁵⁴ as it did in the British offshore industry,¹⁵⁵ the safety and technological improvements would undoubtedly outweigh those costs.

Of course, the question remains: How can an ineffective legislature possibly institute such sweeping changes? Administrative rulemaking offers one solution, as it does not require legislative approval by either the House or the Senate. However, there are some limitations to

¹⁵² See generally Memorandum from Professor Jody Freeman of Harvard Law School to Nat'l Comm'n on the BP Deepwater Horizon, etc., Structural Options for Improving MMS/BOEM Decision Making on Offshore Drilling (Oct. 13, 2010), <http://www.scribd.com/doc/40642315/Jody-Freeman-Presentation-on-Structural-Options-for-MMS-BOEM>. Professor Freeman's excellent memorandum “describes structural options for better integrating scientific, engineering and other technical expertise into Minerals Management Service/Bureau of Ocean Energy Management (MMS/BOEM) decisions related to offshore drilling through more robust interagency consultation and independent review by outside experts.” *Id.* at 1.

¹⁵³ Grant et al., *supra* note 114, at 31.

¹⁵⁴ See *id.* at 31–32.

¹⁵⁵ See *supra* text accompanying notes 130–31.

this approach. First, “all economically significant regulatory actions (defined as potentially having an impact on the economy of \$100 million) and other ‘significant’ regulatory actions by executive branch agencies must be submitted for OIRA [Office of Information and Regulatory Affairs] review before becoming final.”¹⁵⁶ While the exact financial impact of a performance-based regime on the American economy is still undetermined, it would most likely exceed this measure.

Second, administrative rulemaking lacks some of the stability and congressional oversight that accompanies statutory actions.¹⁵⁷ It is also unclear whether the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), the successor to the now-defunct MMS, would be able to institute adequate financial penalties for breach of its regulations. Third, any attempt at significant administrative rule making by BOEMRE would most likely have to be approved by OIRA,¹⁵⁸ an organization “historically focused primarily on cost-benefit analysis.”¹⁵⁹

However, these potential obstacles to change must be balanced against the proven dangers of not changing at all. The ecological damage, loss of life, and citizen outrage that occurred as a result of the *Deepwater Horizon* disaster should serve as an impetus for revamping the regulatory regime currently administering the American offshore oil industry.

¹⁵⁶ Freeman, *supra* note 152, at 7 (citing Exec. Order No. 12,866, at § 6(a)(3)(A)–(C)).

¹⁵⁷ *Id.*

¹⁵⁸ See *supra* text accompanying note 156.

¹⁵⁹ Freeman, *supra* note 152, at 8. Professor Freeman notes: “[T]he current regulatory review process may not be optimally suited to reviewing risk assessment, operational design, spill response and other technical elements of drilling plans. . . .” *Id.*