From Santa Barbara to Macondo to SEMS

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INTRODUCTION

Failures of safety and environmental systems contributed to the blowout and explosion of the Macondo well in the Gulf of Mexico on April 20, 2010, causing the largest oil spill in United States history.¹ Accordingly, safety and environmental management systems (SEMS) have been a focus of the broad regulatory responses to the Macondo event.² The Department of the Interior (DOI) defines a SEMS program as “a comprehensive system to reduce human error and organizational failure” and explains that the intent of its SEMS program is “to focus attention on the role of human error and poor organization in accidents, drive continuous improvement in the offshore industry’s safety and environmental records, encourage the use of performance-based operating practices, and encourage [industry collaboration] to promote the interests of offshore worker safety and environmental protection.”³ In Part I, this article traces the development of the Outer Continental Shelf (OCS) regulatory regime through oil spills and other events that have inspired regulatory responses. In Part II, this article focuses on the SEMS regulations promulgated since the Macondo event. The article compares the predominantly regulatory response to the Macondo event with the predominantly legislative responses to earlier oil spills, all to identify the role of the SEMS regulations in the OCS regulatory scheme that is developing post Macondo.
I. DEVELOPMENT OF THE OCS REGULATORY SCHEME THROUGH 2010

The current regulatory scheme governing oil and gas activities on the OCS took shape, in large part, through a series of crises and corresponding legislative responses. This section traces the development of OCS legislation and regulations, from the “Seaweed Rebellion” of the mid-1900s through the Santa Barbara and Prince William Sound oil spills in the late 1900s, to provide an overview of the OCS regulatory scheme as it existed on the eve of the Macondo event.

A. The Dispute Over Coastal Lands and the Outer Continental Shelf Lands Act

From its origin, federal authority over OCS resources developed through a series of jurisdictional disputes and environmental crises. The first event to spur legislation establishing federal authority over oil and gas activities on the OCS was the post-World War II dispute between coastal states and the federal government for control of the OCS.4

Offshore oil wells began to operate in shallow coastal waters by the 1890s; by 1919, the oil and natural gas industry had developed sufficiently to warrant forming its own national trade association, the American Petroleum Institute (API).5 In the early period of offshore oil exploration and production, coastal states and local entities generally exercised authority over activities in their coastal waters, and this included granting leases for offshore oil wells.6 Then, in 1945, President Harry S. Truman asserted federal authority over resources in offshore areas by means of a proclamation to “extend U.S. jurisdiction over the submerged lands and subsoil of the Outer Continental Shelf,” citing as justification the national “interest in [the] conservation and prudent

6. See James, supra note 5, at 178; see also United States v. California, 332 U.S. 19, 38 (1947) (noting that California authorized permit-granting for offshore oil and gas prospecting through state legislation enacted in 1921); Weaver, supra note 4, at 232–33.
utilization” of mineral resources found there.\textsuperscript{7} This sparked the first phase of the “Seaweed Rebellion” conflict between coastal states and the federal government,\textsuperscript{8} which in turn led to Supreme Court decisions recognizing federal authority over offshore lands.\textsuperscript{9} These disputes ultimately led to the enactment of two major pieces of federal legislation in 1953 to resolve state and federal roles with respect to mineral resources under the continental shelf: the Federal Submerged Lands Act and the Outer Continental Shelf Lands Act (OCSLA).\textsuperscript{10}

The OCSLA was, and remains, the primary federal statute governing resource development on submerged lands subject to federal control. It gives the Secretary of the DOI (the Secretary) authority to oversee federal OCS lands, including development of resources on the OCS by means of a competitive bidding process for granting oil and gas leases.\textsuperscript{11} The OCSLA declares, as the policy of the United States with respect to the development of these resources:

[T]he outer Continental Shelf is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs.\textsuperscript{12}

\textsuperscript{7} Proclamation No. 2667, Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf, 10 Fed. Reg. 12, 305 (Sept. 28, 1945) (codified as Executive Order 9633).


\textsuperscript{10} Submerged Lands Act, Pub. L. No. 31, 67 Stat. 29 (1953); Outer Continental Shelf Lands Act, Pub. L. No. 212, 67 Stat. 462 (1953). The Federal Submerged Lands Act reverted authority to the states over the submerged coastal lands closest to the shorelines, setting the boundaries of state authority at three geographical miles from the state’s recognized coastline, with certain exceptions for historical boundaries in the Gulf of Mexico. See 43 U.S.C. § 1301(b) (2012); see also id. §§ 1312–1313. In litigation following enactment of the Federal Submerged Lands Act, Texas and Florida established state authority over the area extending to the further boundary of three marine leagues (or about nine miles) from their respective coastlines. See United States v. Louisiana, 363 U.S. 1, 66 (1960); United States v. Florida, 363 U.S. 121, 129 (1960).

\textsuperscript{11} See 43 U.S.C. §1337(a). The OCSLA defines the “outer Continental Shelf” as “all submerged lands lying seaward and outside of the [seaward boundaries of the States’ coastal waters], and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.” 43 U.S.C. §§ 1301(a), 1331(a).

\textsuperscript{12} 43 U.S.C. §1332(3).
The OCSLA also expressly acknowledges the interests of the states in this process, declaring that “the rights and responsibilities of all States . . . to preserve and protect their marine, human, and coastal environments . . . should be considered and recognized.”13 Federal OCS policy thus encompasses three main goals: development of resources for the (economic) benefit of the public, environmental protections, and maintenance of national interests (among them, the needs of the coastal states).14 Since each of these cannot be maximized simultaneously, there is a structural tension between and among the OCSLA’s goals that often plays out in the balancing of needs and priorities through the OCS leasing process.

The OCSLA granted the Secretary authority to promulgate regulations for OCS leasing.15 Within a year of the OCSLA going into effect, the Secretary set forth the first OCSLA regulations.16 The Secretary also delegated authority to oversee the OCS leasing program to the Director of the Bureau of Land Management (BLM) within the DOI, who in turn delegated authority to the Manager of the BLM’s OCS Office.17 The OCSLA regulations made the BLM responsible for overseeing activities up to the point of lease issuance and, thereafter, for royalty collection from oil and gas activities.18 Separately, the Conservation Division of the United States Geological Survey (USGS) was responsible for supervising energy production and exploration activities and for overseeing lessees after leases were issued.19

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14. See Blanco v. Burton, No. Civ.A. 06-3813, 2006 WL 2366046, at *2 (E.D. La. Aug. 14, 2006) (“[T]he Secretary is required to consider and balance the potential for environmental harm, the potential for adverse impact to the coastal zone, and the potential for the discovery of resources, while also ensuring the public a fair and equitable return on the resources of the OCS.”).
19. See Oil and Gas and Sulphur Operations in the Outer Continental Shelf, 30 C.F.R. § 250.10–.11 (1959); Delegation of Authority with Respect to Development and Leasing of Minerals in Submerged Lands, 18 Fed. Reg. 5715 (1953); Nat’l Comm’n Report, supra note 1, at 63; James, supra note 5, at 179 n.20.
Between 1953 and 1968, regulators under the OCSLA conducted twenty-three lease sales. The offshore energy industry grew during this time, as the OCS increasingly became a crucial source of domestic oil and gas resources. The API continued to evolve as well, moving its offices to Washington, D.C. by the end of the 1960s.

B. The Santa Barbara Oil Spill, the National Environmental Policy Act, the Coastal Zone Management Act, and the Outer Continental Shelf Lands Act Amendments of 1978

On January 28, 1969, a drilling rig blowout in the Santa Barbara Channel resulted in an oil spill estimated at up to 100,000 barrels—at the time, the largest oil spill in United States history. Within ten days, DOI regulators suspended all activities on leases off the coast of California near the area of the blowout. The suspension was supposed to last until environmental studies could be conducted to inform the next course of action, but the Santa Barbara oil spill was followed by blowouts in the Gulf of Mexico in February and December of 1970, and, in September of 1971, the Secretary announced that the California suspension would not be lifted. This led to a challenge brought by oil companies in which the United States Court of Appeals for the Ninth Circuit ultimately upheld the Secretary’s authority under the OCSLA to suspend operations—but not indefinitely, without triggering a takings claim.

Meanwhile, the DOI undertook substantial revisions to its OCSLA regulations. It issued orders implementing new rules for testing safety equipment and began to require prior approval of plans and equipment used in exploration and production activities. The API participated actively in the issuance of these orders, and itself undertook a number of actions, including drafting recommended practice guidance documents and facilitating the sharing of technological innovations among offshore operators. But the most significant outcomes from the Santa Barbara oil spill were the major congressional actions it provoked, including the National Environmental

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20. James, supra note 5, at 179.
21. See API History, supra note 5.
22. Id.
23. See Nat’l Comm’n Report, supra note 1, at 28; James, supra note 5, at 180.
24. Nat’l Comm’n Report, supra note 1, at 29; James, supra note 5, at 180.
26. See Union Oil of Cal. v. Morton, 512 F.2d 743, 751–52 (9th Cir. 1975); Gulf Oil Corp. v. Morton, 493 F.2d 141, 146–48 (9th Cir. 1973).
27. Nat’l Comm’n Report, supra note 1, at 30, 58. The USGS also increased its scope of enforcement by revamping its inspection program and dramatically increasing the number of USGS inspectors and engineers. Id. at 30.
28. Id.
Protection Act (NEPA), the Coastal Zone Management Act (CZMA), and the
1978 Amendments to the OCSLA (the 1978 Amendments). 29

1. The National Environmental Policy Act

Signed into law on New Year’s Day in 1970, NEPA had lofty environmental goals, and early litigation soon ensured that the statute would play a central role in mandating the consideration of environmental consequences for federal actions. 30 NEPA requires that all federal agencies include a detailed environmental impact statement (EIS) for any “major Federal action significantly affecting the quality of the human environment.” 31 In addition to an assessment of the “environmental impact of the proposed action,” the EIS must include an assessment of any unavoidable adverse environmental effects of the action, alternatives to the proposed action (including no action), consideration of short-term versus long-term consequences, and any “irreversible and irretrievable commitments of resources” the action would require. 32

Certain federal actions are not subject to the full EIS review and require only an abbreviated review known as an Environmental Assessment (EA). 33 If the EA process does not identify a significant impact of the federal action, the agency issues a Finding of No Significant Impact (FONSI), and the environmental review process ends. 34 Alternatively, some federal actions are

30. See Calvert Cliffs Coordinating Comm. v. U.S. Atomic Energy Comm’n, 449 F.2d 1109 (D.C. Cir. 1971); Nat’l Comm’n Report, supra note 1, at 59 n.23, n.26. NEPA “declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” 42 U.S.C. § 4331(a).
32. Id.; see, e.g., Theodore Roosevelt Conservation P’ship v. Salazar, 661 F.3d 66, 72 (D.C. Cir. 2011) (“Regulations implementing NEPA . . . require that an agency developing an EIS evaluate ‘all reasonable alternatives,’ including a no-action alternative.”).
33. See 40 C.F.R. § 1501.3–4, 1508.9 (2015); see also Blanco v. Burton, 2006 WL 2366046, at *8 (E.D. La. Aug. 14, 2006). The Council on Environmental Quality is the federal agency with authority to promulgate regulations under NEPA, which are found at 40 C.F.R. §1500.1–6.
34. See 40 C.F.R. § 1508.13.
exempted from the EIS process as “categorical exclusions,” although these have limited applicability on the OCS.\textsuperscript{35}

The NEPA review process does not mandate any particular outcome (that is, the agency is under no obligation to select the most environmentally beneficial alternative), but the process does require a thorough (and time- and resource-consuming) review and consideration of environmental impacts.\textsuperscript{36}

\section*{2. The Coastal Zone Management Act}

Another major piece of federal legislation provoked by the Santa Barbara spill, the CZMA, applies to all coastal states that elect to participate in developing a coastal resource plan and confers review authority onto those that do, with the goal of resolving conflicts between state and federal entities over coastal resources.\textsuperscript{37} The CZMA provided grants to coastal states to enable the states to develop and implement management programs to protect natural resources.\textsuperscript{38} Once the Secretary of Commerce approves a state’s management program, federal activities that affect the state’s coastal zone must “be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of the State management program[],” and states gain the right to review certain federal actions for consistency with the state’s coastal management plan.\textsuperscript{39} With respect to the OCS leasing program, applicants for federal licenses or permits affecting a state’s coastal zone or its resources must provide certification that the proposed activity complies and is consistent with the state’s management program; this requirement is generally referred to as a “consistency determination.”\textsuperscript{40} States’ rights

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\textsuperscript{37} \textit{See} 16 U.S.C. §§ 1454–1456 (2012); \textit{see also} James, supra note 5, at 182–83.

\textsuperscript{38} \textit{See} 16 U.S.C. §§ 1454, 1455.

\textsuperscript{39} 16 U.S.C. § 1456(c)(1)(A); \textit{see} James, supra note 5, at 183.

\textsuperscript{40} 16 U.S.C. § 1456(c); \textit{see e.g.}, \textit{Blanco}, 2006 WL 2366046, at *11 (E.D. La. Aug. 14, 2006). Regulations under the CZMA were not promulgated until several years after the statute went into effect, but the CZMA nevertheless “initially served as the primary program for ensuring against undue risk to . . . marine and coastal resources” because these considerations were not fully integrated into the OCSLA until passage of the 1978 Amendments. \textit{See} Sam Kalen, \textit{The BP Macondo Well}
under the CZMA are tempered by the federal government’s ultimate authority to effectively overrule a state’s (in)consistency determination.41

3. The OCSLA’s 1978 Amendments

Forged by the competing pressures of environmental concerns and the perceived need to streamline access to domestic oil and gas in response to the oil embargo and energy crisis of the 1970s, the OCSLA leasing process took its current form with the 1978 Amendments.42 The 1978 Amendments put in place a leasing process with four main phases: (1) preparation of a five-year leasing plan, (2) the lease sale, (3) exploration, and (4) development and production.43 In the first phase, the Secretary prepares the leasing plan, which includes a selection of proposed lease locations and a schedule of proposed lease sales that will, in the Secretary’s determination, best meet the nation’s energy needs within a five-year plan period.44 Second, the agency calls for, accepts, and evaluates nominations for potential lease areas, then publishes a recommended list in advance of the proposed lease sale date.45 The Secretary then grants leases, on terms set by the agency, to the highest qualified

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41. Lynn S. Sletto, Piecemeal Legislative Proposals: An Inappropriate Approach to Managing Offshore Oil Drilling, 33 GOLDEN GATE U. L. REV. 557, 562 (2003); see also Blanco, 2006 WL 2366046, at *11 (“If the state objects, a federal agency may proceed with its proposed activity only if it has concluded that consistency with the enforceable policies of the state’s management program is prohibited by existing law applicable to the federal agency, and has described to the state, in writing, the legal impediments to full consistency with the state’s policies; or if it determines that its activity is fully consistent with the state’s enforceable policies.”).

42. See James, supra note 5 at 185–87. Up to the time of the Santa Barbara oil spill, disputes over oil and gas development on the OCS had centered on who had the right to revenues from mineral resources, and not on whether or how to develop those resources, or how environmental and safety considerations should factor into those decisions. Mark Davis, Lessons Unlearned: The Legal and Policy Legacy of the BP Deepwater Horizon Spill, 3 WASH. & LEE. J. ENERGY, CLIMATE, & ENV’T 155, 168 (2012); James, supra note 5, at 179, 181, 185. The Santa Barbara oil spill and other events captured the public’s attention and inspired a series of environmental legislation in the 1970s. See James, supra note 5, at 181; see also note 62, infra. The passage of NEPA in 1969, CZMA in 1972, and the 1978 Amendments to the OCSLA renewed the emphasis on safety and environmental protection, in addition to increasing the emphasis placed on states’ roles in the leasing process. See 43 U.S.C. §1802 (2012); see also James, supra note 5, at 186–87. At the same time, the oil embargo and energy shortage of the early 1970s brought urgency to the development of domestic oil and gas resources, and OCS leasing was viewed as a key component of United States energy independence. See James, supra note 5, at 185.

43. See 43 U.S.C. §§ 1337, 1340, 1344, 1345, 1351.

44. 43 U.S.C. § 1344(a).

45. 43 U.S.C. § 1337.
In the third phase, lessees submit exploration plans, with
details of proposed well locations, activities, and equipment, for
evaluation and approval. In the fourth phase, lessees submit
development and production plans for approval. The policies of the
OCSLA are woven into its directives, mandating the factors that the
Secretary must consider during each phase.

The 1978 Amendments also revised the guidelines for health, safety,
and environmental (HS&E) regulations. The OCSLA deploys a “best
available and safest technologies” (BAST) standard for all technologies
for drilling operations conducted on rigs and other installations. The
BAST standard encapsulates the three OCSLA policies of environment,
development, and national and state interests by requiring technologies
“to be economically feasible, wherever equipment failure would have a
significant effect on safety, health, or the environment, except where the
Secretary determines that the incremental benefits are clearly insufficient
to justify the incremental costs of utilizing such technologies.” Lessees
and permit holders must also conduct operations within the leased or
permitted area “in compliance with regulations intended to protect
persons, property, and the environment on the [OCS].” The regulators’
 enforcement authority allows for onsite inspections to ensure compliance
with environmental and safety regulations.

NEPA and the CZMA are integrated into the OCSLA leasing
process, which requires consideration of both environmental impacts
under NEPA and state coastal management plans under the CZMA. In
the five-year plan phase, which is considered a “major federal action
significantly affecting the quality of the human environment” under
NEPA, the Secretary must conduct an EIS. OCSLA regulations also
require NEPA analysis during the lease sale stage; at this phase,
however, the agency conducts only a more limited EA before
recommending the list of areas to be leased. The OCSLA effectively
dees at least the first development and production plan in any OCS
planning area (other than in the western and central Gulf of Mexico,

46. Id.
47. 43 U.S.C. § 1340(c).
50. 43 U.S.C. §§ 1333(a)(1), 1347(b).
51. 43 U.S.C. § 1347(b).
52. 43 U.S.C. § 1348(b); see also 43 U.S.C. § 1348(b)(1).
54. See 42 U.S.C. § 4332 (2006); e.g., Natural Res. Def. Council, Inc. v. Hodel,
55. See 30 C.F.R. § 556.0 (2015).
where extensive development activities have already occurred) to be a major federal action requiring the agency to conduct a full EIS at least once per area.\textsuperscript{56} Thus, during the exploration and development and production phases, regulators conduct NEPA analyses—or at least review and reconsider the analyses conducted during prior phases.\textsuperscript{57}

Likewise, the OCSLA expressly invokes CZMA compliance, requiring the implementing agency to submit exploration plans for review by the applicable state’s Coastal Zone Management agency and, if necessary, to account for any state objections to the plan.\textsuperscript{58} The exploration plans require a consistency certification from any affected state unless the Secretary of Commerce makes a contrary consistency determination or otherwise determines that the plan serves the interests of national security.\textsuperscript{59} States also have authority under the CZMA to review and comment on development and production plans, to identify relevant legal and other factors for the Secretary to consider during the leasing process, and to submit comments on the leasing program that the Secretary is required—within certain bounds—to accept.\textsuperscript{60} Although inherent tension exists between the environmental focus of the CZMA and NEPA and the expeditious development directives of the OCSLA, the 1978 Amendments attempted to bind these goals together, at least procedurally, within certain OCS leasing steps.\textsuperscript{61}

\textsuperscript{56} See ADAM VANN, CONG. RESEARCH SERV., RL33404, OFFSHORE OIL AND GAS DEVELOPMENT: LEGAL FRAMEWORK 12 (2014).


\textsuperscript{60} See 43 U.S.C. §§ 1344, 1345, 1351; see also 30 C.F.R. § 550.267.

\textsuperscript{61} See, e.g., James, supra note 5, at 194 (“The overriding concern of the Secretary of Commerce under the CZMA is protection of the coastal environment from adverse impact caused by OCS development. On the other hand, the Secretary of the Interior’s concern under the [the OCSLA] is to proceed with development of the [OCS] while minimizing environmental impacts. As a result, the two secretaries are empowered to make decisions regarding the same subject matter under separate acts whose objectives are not entirely consistent.”).
Legislation to resolve such conflicting goals and directives was characteristic of the approach taken towards the OCS in the 1970s. Responses to the Santa Barbara oil spill and other environmental concerns during the 1970s were overwhelmingly addressed through congressional action, with litigation often leading to further legislative enactments.\(^{62}\) Regulations played neither a primary nor a direct role in shaping the OCSLA regulatory scheme; instead, Congress often resolved the interplay among the OCSLA, NEPA, and the CZMA through legislative amendments.

C. The Exxon Valdez Oil Spill and the Oil Pollution Act of 1990

The 1978 Amendments also introduced liability for offshore facility owners and operators, remedies for parties with economic losses due to oil spills, and an Oil Spill Liability Fund as an alternative for recovery.\(^{63}\) These liability issues became the renewed focus of legislative action, mainly with regard to vessels, after the Exxon Valdez tanker grounded on March 24, 1989, spilling approximately eleven million barrels of oil into Alaska’s Prince William Sound.\(^{64}\) In response to the Exxon Valdez spill and three other oil spills that followed in rapid succession in United States waters, Congress passed the Oil Pollution Act of 1990 (OPA) quickly and nearly unanimously, introducing a new comprehensive oil spill liability scheme that requires “responsible parties” to pay for a broad

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63. James, supra note 5, at 201–02.

64. See Davis, supra note 42, at 163.
range of oil spill-related costs. Elements of the new liability scheme had been on the table for fifteen years at the time, but were only enacted into legislation following the Exxon Valdez oil spill.

In addition to establishing a new oil spill liability scheme and recovery fund, OPA’s main provisions address technology, planning for oil spills, and management of oil spill responses. OPA mandates specific technology requirements, notably for double hulls in tankers. OPA also calls for worst-case scenario planning for oil spills at multiple spatial scales ranging from national to facility-specific.

Although OPA is primarily concerned with vessels carrying oil, certain provisions apply to offshore facilities, and responsible parties include the owners and operators of those facilities. Responsible parties for offshore facilities, like responsible parties for vessels, are required to maintain evidence of financial responsibility up to the statutory applicable maximum liability amount.

DOI regulators also assume responsibility for certain OPA requirements, including planning with respect to offshore facility-specific response plans and some oil spill response activities. These regulations detail the requirements for facility-specific response plans, and the regulators’ authority

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66. Griggs, supra note 65, at 59. The Exxon Valdez oil spill also resulted, at least temporarily, in increased funding allocated to research and development for oil spill prevention technologies. Larsen, supra note 65, at 12.


68. 46 U.S.C. § 3703(a) (2015); see also Ramseur, supra note 67, at 13.

69. See, 33 U.S.C. § 1321; see also Hartsig, supra note 67, at 280–81.

70. 33 U.S.C. § 1321(f); see also Weaver, supra note 65, at 151 n.19.


72. See 30 C.F.R. part 254; see also Hartsig, supra note 67, at 281-83; Nat’l Comm’n Report, supra note 1, at 83. Agency responsibilities under OPA have been augmented via a series of Executive Orders and Memoranda of Understanding. Ramseur, supra note 67, at 21. Following reorganization of the MMS, the DOI agency currently assuming these responsibilities is BSEE, as addressed infra.
extends to determining what constitutes a worst-case scenario and what response is adequate.73

A relatively new agency, the Minerals Management Service (MMS), became responsible for the additional duties imposed by OPA. In 1982, prior to OPA’s passage, Secretary of the Interior James Watt had overhauled the regulatory structure overseeing OCSLA administration.74 Via Secretarial Order, Secretary Watt created the MMS as a new entity to take over the full suite of OCSLA leasing, enforcement, and revenue collection responsibilities previously shared between the BLM and USGS.75 Within the new MMS, these roles were divided between the Offshore Energy and Minerals Management program and the Minerals Revenue Management program.76

Shortly after its creation, the MMS oversaw an ambitious five-year leasing plan that set an initial goal of leasing nearly one billion acres in federal waters.77 Because congressionally-issued moratoriums limited the areas available for lease to only the Gulf of Mexico and parts of Alaska, the scope of the five-year plan was not realized.78 However, Secretary Watt’s innovation of offering area-wide leases (rather than leases of only individual tracts) became—and remains—a part of the OCS leasing scheme.79

In the years prior to the Exxon Valdez oil spill, the MMS had begun to study and consider revising its safety program. Alarmed by catastrophic and deadly sinkings of offshore facilities off the coasts of Norway and Canada and production platform explosions off the coasts of Scotland and Louisiana, all of which took place in the 1980s, the MMS “had come to appreciate that a command and control, prescriptive approach to regulation did not adequately address the risks generated by the offshore industry’s

73. 30 C.F.R. § 254.21 (2015); see Davis, supra note 42, at 166.
74. See Dep’t of the Interior, Secretarial Order No. 3071 (Jan. 19, 1982).
75. See Dep’t of the Interior, Secretarial Order No. 3071 Amendment No. 1 (May 10, 1982); Dep’t of the Interior, Secretarial Order No. 3071 Amendment No. 2 (May 26, 1982); Dep’t of the Interior, Secretarial Order No. 3087 (Dec. 3, 1982); Dep’t of the Interior, Secretarial Order No. 3087 Amendment No. 2 (Feb. 7, 1983); see Nat’l Comm’n Report, supra note 1, at 63–64.
77. Davis, supra note 42, at 169.
79. Id. In the area of HS&E, the MMS also promulgated “an array of prescriptive safety regulations: hundreds of pages of technical requirements for pollution prevention and control, drilling, well-completion operations, oil and gas well-workovers (major well maintenance), production safety systems, platforms and structures, pipelines, well production, and well-control and -production safety training.” Id. at 68; see 30 C.F.R. Part 250. The MMS already had responsibility for annual and unscheduled inspections of operations, partly for the purpose of overseeing these safety requirements, before OPA added oil spill response planning to its responsibilities. Nat’l Comm’n Report, supra note 1, at 68.
new technologies and exploration, development and production activities, including industrial expansion into deeper waters.” 80 Regulators in other countries began to adopt risk-based approaches that could generate positive feedback loops in safety policies and practices, rather than a “prescriptive regulation and inspection model,” and the MMS began to consider such a shift in its approach to HS&E regulation as well. 81

The central features of these risk-based approaches are industry-driven risk assessments, paired with systematic risk management procedures, and backstopped with—rather than driven by—specific minimum safety standards. 82 In the 1980s, an internal MMS task force and the National Research Council’s Marine Board studied MMS safety procedures at the agency’s request and recommended that the MMS focus on identifying and combating safety risks and circumstances, particularly those involving human factors, operational procedures, and modification of equipment and facilities,” and on employing inspections in order to systematically identify risks rather than continuing to focus on noncompliance by means of regulatory specifications. 83 Although these recommendations had already been made at the time of OPA’s enactment, none were incorporated into the new legislation. 84

80. Id. at 68–70. The Alexander Kielland, a rig and offshore housing structure, capsized off the coast of Norway in 1980, and the Ocean Ranger sank off the coast of Canada in 1982. Explosions occurred at the Piper Alpha platform off the coast of Scotland in 1988 and on a platform off the coast of Louisiana in South Pass Block 60 in 1989. Collectively, the accidents accounted for hundreds of fatalities. Id.

81. Id. at 69.

82. Id. (“Under the new safety-management model, minimum standards for structural and operational integrity (well control, prevention of fires and explosions, and worker safety) remained in place. But the new burden now rested on industry to assess the risks associated with offshore activities and demonstrate that each facility had the policies, plans, and systems in place to manage those risks.”)


84. Id. (“Ironically, Congress enacted the Oil Pollution Act of 1990, but failed to address any of the regulatory deficiencies identified by the Marine Board, while adding to MMS’s regulatory responsibilities.”).
D. The OCS Regulatory Scheme in Place at the Time of the Macondo Event: SEMS Proposals Are Still Not Formalized

In April 2010—the month of the Macondo event—the OCS regulatory scheme and the overall framework of environmental laws and regulations reflected the evolving response to the Santa Barbara and Exxon Valdez oil spills.\(^85\) The tensions among the three central policies of the OCSLA were counterbalanced by new legislation. The 1978 Amendments and the CZMA augmented states’ roles, while NEPA, OPA, and other environmental legislation added to OCLSA’s environmental protections. All the while, the offshore energy industry continued to grow, especially in the western Gulf of Mexico, and the MMS focused on regulation and revenue collection.

The MMS characterized its own scheme as having “both prescriptive and performance elements” and continued to take initial steps toward developing its HS&E regulations during the 1990s and early 2000s.\(^86\) In 1991, the MMS published a notice requesting comments on “alternative strategies to promote safety and environmental protection, specifically a requirement that outer continental shelf lessees and/or operators develop, maintain, and implement a safety and environmental management program.”\(^87\) No SEMS regulations materialized from this call for comments, or from an advance notice of proposed rulemaking in 2006, or from a proposed rulemaking in 2009 that would have implemented some elements of a SEMS approach on the OCS.\(^88\)

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\(^{85}\) See Griggs, supra note 65, at 59. Over the same time span, there was a general increase in legislation providing greater worker and environmental protections—including several federal statutes governing the OCS. Davis, supra note 42, at 173 (referencing NEPA, the Clean Water Act, the CZMA, the Marine Mammal Protection Act, the 1978 Amendments to the OCSLA, and OPA).


\(^{87}\) Nat’l Comm’n Report, supra note 1, at 71.

Thus at the time of the Macondo event, the MMS’s partially prescriptive system included some HS&E regulations and an inspection program, but operators could still choose whether to adopt a SEMS plan. In 2009, nearly half of the operators on the OCS had not yet done so. In the absence of formal MMS action on SEMS, the API had developed its own “recommended practice” safety guidance documents, along with a suite of standards, reports, studies, and technical publications that were widely used by the offshore industry. In practice, the API assumed “a dominant role in developing safety standards for the oil and gas industry.”

II. REGULATORY RESPONSES TO THE DEEPWATER HORIZON OIL SPILL

The blowout of the Macondo well on April 20, 2010 led to the latest revamping of the OCS regulatory scheme. It resulted in eleven worker deaths, an oil spill estimated at nearly five million barrels discharged into the Gulf of Mexico, and massive response and cleanup efforts. Unlike the Santa Barbara and Exxon Valdez oil spills, however, the Macondo event has not sparked any significant congressional action to reshape regulation of the OCS. Instead, the response has been primarily executive and regulatory, including moratoriums, increased enforcement efforts, the reorganization of the regulatory agency, and a series of new rules on workplace safety and

89. E.g., Safety and Environmental Management Systems, 71 Fed. Reg. at 29,277; see also Nat’l Comm’n Report, supra note 1, at 71 (“At the time of the Macondo blowout – almost 20 years after [MMS’s original proposal to develop SEMS] – MMS had still not published a rule mandating that all operators have plans to manage safety and environmental risks. The agency’s efforts to adopt a more rigorous and effective risk-based safety regulatory regime were repeatedly revised, refined, delayed, and blocked alternatively by industry or skeptical agency political appointees. MMS thus never achieved the reform of its regulatory oversight of drilling safety consonant with practices that most other countries had embraced decades earlier.”).


92. Id. at 225.

93. Id. at vi.

94. Id. at vi, 211 n.76.

training, blowout prevention, well design, and drilling safety. This section provides a brief overview of some of these reforms, focusing primarily on the SEMS rules.

In immediate response to the Macondo event, Secretary of the Interior Ken Salazar halted deepwater drilling activities in the Gulf of Mexico by imposing a moratorium, which was issued on May 28, 2010 and was intended to last six months. However, oil and gas services providers succeeded in enjoining the moratorium on June 22, 2010. The Secretary then rescinded the initial moratorium and on July 12, 2010 issued a second moratorium that was intended to remain in place until November 30, 2010 “or until such earlier time that the Secretary determines that deepwater drilling operations can proceed safely.” The Secretary also announced that interim safety rules would be issued and implemented during this time. The second moratorium was lifted on October 12, 2010, and the initial SEMS regulations were published in the Federal Register three days later. The first new drilling permit issued after the moratorium was not approved until February 28, 2011.

100. Id. The Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) issued NTL No. 2010-N05 on June 8, 2010 in order to immediately implement some initial safety measures.
Reorganization of the MMS’s responsibilities and structure was similarly swift. Within three weeks of the Macondo event, Secretary Salazar stripped the MMS of its enforcement responsibilities and, one week after that, announced a restructuring of the MMS into three new agencies, each taking on a subset of the range of functions that had previously been handled by the MMS.103 This reorganization would ultimately result in the creation of the Bureau of Ocean Energy Management (BOEM), the Bureau of Safety and Environmental Enforcement (BSEE), and the Office of Natural Resources Revenue (ONRR).104 Secretary Salazar’s justification for the restructuring echoed the OCSLA policies—it had the goals of “improv[ing] the management, oversight, and accountability of activities on the Outer Continental Shelf; ensur[ing] a fair return to the taxpayer from royalty and revenue collection and disbursement activities; and provid[ing] independent safety and environmental oversight and enforcement of offshore activities.”105 Though accomplished quickly, this reorganization was an idea that had been considered before the Macondo event; DOI and congressional studies had already recommended MMS restructuring years earlier.106

Within months of the Macondo event, the DOI began formal rulemaking on a number of subjects—a process that is still ongoing. Rulemaking efforts have included final rules on safety measures, SEMS, and OPA liability limits for offshore facilities, as well as proposed rules for exploration activities in the Arctic, blowout preventers and other


104. Nat’l Comm’n Report, supra note 1, at 55 n.2. ONRR functions were separated on October 1, 2010, and, until BOEM and BSEE structures were in place, the residual roles of the MMS were handled by an interim organization, BOEMRE. See Order No. 3302, Ken Salazar, Sec’y of the Interior, Change the Name of the Minerals Management Service to the Bureau of Ocean Energy Management, Regulation, and Enforcement, available at http://elips.doi.gov/ELIPS/0/doc/165 /Page1.aspx.


106. See Ramseur, supra note 95, at 11.
drilling procedures, and the regulation of dispersants.\textsuperscript{107} In addition, within five years of the Macondo event, BSEE issued forty Notices to Lessees and Operators (NTLs) to offer agency guidance and interpretation outside the formal rulemaking process, including one NTL that provisionally implemented new safety measures until the SEMS and other new safety rules could be fully put in place.\textsuperscript{108}

In contrast to the flurry of regulatory activity—and despite more than sixty congressional hearings held and more than 150 legislative proposals put forth in the 111th Congress alone—federal legislation in response to the Macondo event has been minimal.\textsuperscript{109} Although a few pieces of legislation related to oil spills have been enacted, HS&E subjects have been addressed only in isolated provisions; and no legislation has taken on these subjects comprehensively.\textsuperscript{110} The most significant legislative proposal related to these

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108. See Ramseur, supra note 95, at 11. These NTLs “are formal documents that provide clarification, description, or interpretation of a regulation or OCS standard; provide guidelines on the implementation of a special lease stipulation or regional requirement; provide a better understanding of the scope and meaning of a regulation by explaining BSEE interpretation of a requirement; or transmit administrative information such as current telephone listings and a change in BSEE personnel or office address.” BSEE, Notices, Letters, and Information to Lessees and Operators (NTLs), http://www.bsee.gov/Regulations-and-Guidance/Notices-to-Lessees/index/ [perma.cc/YU6R-ZQTN] (last visited July 5, 2015). NTLs are utilized by other DOI agencies as well. See Blair Klein, Notices to Lessees Under Federal Leases, Proceedings of the Rocky Mountain Mineral Law Twenty-Fifth Annual Institute (1979).

109. See Ramseur, supra note 95, at 4–5.

110. See id. at 13–15. More than five years after the Macondo event, only one such piece of federal legislation had been enacted—the RESTORE Act. See id., at 4–5. Passed in 2012 as part of P.L. 112-141, the “Moving Ahead for Progress in the 21st Century Act” or the “MAP–21 Act,” the RESTORE Act established a Gulf Coast Restoration Fund in the General Treasury, into which eighty percent of certain Clean Water Act Section 311 penalties are to be paid by the Macondo event’s responsible parties. See H.R. 4348, 112th Cong. §1602 (2012). Funds are distributed to a number of entities focused on designated restoration and related activities in the Gulf states affected by the oil spill. Ramseur, supra note 95, at 5.
concerns was the Consolidated Land, Energy, and Aquatic Resources (CLEAR) Act, which passed the House but not the Senate.\footnote{See Griggs, supra note 65, at 76. Similarly, the “Blowout Prevention Act of 2010,” including a repeal of liability limits and other revisions to OPA, passed the House but failed to emerge from a Senate committee. See id. at 76.} The CLEAR Act included a number of HS&E-related provisions: mandatory SEMS for OCS operations, equipment safety standards and inspection and certification requirements for blowout preventers, and well cementing performance requirements.\footnote{Consolidated Land, Energy, and Aquatic Resources Act of 2010, H.R. 3534, 111th Cong. §§ 102, 205; see also Griggs, supra note 65, at 77 n.141.} Nevertheless, some provisions of the CLEAR Act, such as the replacement of the MMS with three new bureaus, were implemented directly by DOI regulation, bypassing the legislative process.\footnote{Id.}

A. Key Provisions of the SEMS Regulations

An interim final rule published on October 14, 2010 put certain safety measures in place.\footnote{Oil and Gas and Sulphur Operations in the Outer Continental Shelf–Increased Safety Measures for Energy Development on the Outer Continental Shelf, 75 Fed. Reg. 63,345 (Oct. 14, 2010) (to be codified at 30 C.F.R. pt. 250).} The final rule on Safety and Environmental Management Systems (the Workplace Safety Rule) was published on October 15, 2010, just short of six months after the Macondo event.\footnote{Oil and Gas and Sulphur Operations in the Outer Continental Shelf–Safety and Environmental Management Systems, 75 Fed. Reg. 63,609 (Oct. 15, 2010) (to be codified at 30 C.F.R. pt. 250); see also SEMS Fact Sheet, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, http://www.bsee.gov/Regulations-and-Guidance/Safety-and-Environmental-Management-Systems---SEMS/Fact-Sheet/ [https://perma.cc/DRV6-24YA] (last visited July 6, 2015).} This rule included many of the same provisions that had stalled at the proposed rulemaking stage four years earlier.\footnote{See Safety and Environmental Management Systems, 75 Fed. Reg. at 63,610; see also Ramseur, supra note 95, at 12 n.56.} It was followed by a notice of proposed rulemaking, published September 14, 2011 and made final on April 5, 2013, for a rule (SEMS II) to “provid[e] greater protection by supplementing operators’ SEMS programs with employee training, empowering field level personnel with safety management decisions and strengthening auditing procedures by requiring them to be completed by independent third parties.”\footnote{See BSEE, supra note 115.} SEMS II “supplements the requirements in [API’s Recommended Practice 75 (API RP 75)] to ensure that all companies are implementing current best practices and
establishing well-functioning SEMS programs.” The SEMS II rule required operators on the OCS to submit their first audits by November 15, 2013 and to conduct audits in compliance with the rule by June 4, 2015.

The Workplace Safety Rule thus makes SEMS mandatory for the first time on the OCS. It incorporates by reference all thirteen elements of API RP 75, as well as some additional requirements. The Workplace Safety Rule, as applied to offshore facilities, requires operators to: assemble safety and environmental information, assess facility-level risk through a hazards analysis, implement a program to manage facility or operations changes, establish safe work practices, conduct safety and technical training for employees and contractors, maintain mechanical integrity, conduct pre-startup reviews of all systems, develop emergency response and control plans and procedures for incident investigations, maintain SEMS program documentation, and conduct internal audits at regular intervals.

SEMS II augments the Workplace Safety Rule’s requirements and adds details. Several of the elements added by the SEMS II rule focus on “key ways for personnel to help ensure safe performance of oil and gas activities on the OCS.” SEMS II requires facilities to establish stop work authority (SWA) and ultimate work authority (UWA) procedures aimed at authorizing any personnel to stop potentially dangerous activities and clarifying who has decision-making authority, respectively. SWA makes it the responsibility of any individual to stop work being done at a facility if that person witnesses an activity “creating imminent risk or danger.” The procedures outlining a facility’s SWA


120. Safety and Environmental Management Systems, 75 Fed. Reg. at 63,610; see also SEMS Fact Sheet, supra note 115.

121. See SEMS Fact Sheet, supra note 115.


126. 30 C.F.R. § 250.1930(a); see also Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,424.
program must be presented at every orientation and reviewed at every safety meeting.\textsuperscript{127} UWA procedures set forth the “requirements establishing who has UWA on the facility for operational safety and decision-making at any given time.”\textsuperscript{128} The SWA and UWA procedures are intended to dovetail, so that once a person witnesses an immediate risk and exercises SWA, resulting in a work stoppage, the person with UWA then determines whether the risk has been resolved such that work can resume.\textsuperscript{129}

In addition, SEMS II requires that an independent accredited auditor conduct audits of the SEMS program’s effectiveness.\textsuperscript{130} Specifically, the regulations require facilities to conduct audits meeting the specified APR RP 75 requirements and using an Audit Service Provider (ASP) that is accredited by a BSEE-approved Accreditation Body (AB).\textsuperscript{131} Qualifications for these ASPs and ABs are largely set forth in API publications incorporated by reference into the regulations.\textsuperscript{132} Under this program, an audit team led by an independent ASP—not BSEE—will perform audits of each SEMS program on a three-year cycle.\textsuperscript{133} BSEE’s role in the auditing process is to approve the ABs that in turn accredit the ASPs.\textsuperscript{134}

B. Health, Safety, and Environment Regulations Before and After the Macondo Event

The SEMS regulations in some ways represent a departure from the OCS regulatory scheme in existence prior to the Macondo event. BSEE envisions the SEMS program as “the cornerstone of BSEE’s move toward a hybrid regulatory approach” that will “focus both industry’s

\textsuperscript{127} 30 C.F.R. § 250.1930(e); see also Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,431.
\textsuperscript{128} Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,424; see also 30 C.F.R. § 250.1931.
\textsuperscript{130} 30 C.F.R. § 250.1920; see also Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. 20,424.
\textsuperscript{132} See id. §§ 250.1921, 250.1922.
\textsuperscript{133} Id.
\textsuperscript{134} Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,430. In response to a comment to the proposed rule, BSEE clarified that only the leaders of the audit team must be ASP employees, representatives, or agents. Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,430. The remaining members of the audit team can be operator personnel in order to allow the operator “flexibility to utilize in-house expertise on the audit team.” Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,430.
and BSEE’s attention, resources, and initiatives on . . . an underlying safety culture to promote continuous improvements in safety and environmental performance.” 135 SEMS is intended to be a “dynamic program,” and BSEE has made efforts to increase the flexibility of its rules and to make them less prescriptive; this includes allowing operators to propose alternative procedures and technologies for BSEE’s approval, provided they meet safety and environmental protection standards at least equivalent to those set forth in BSEE’s regulations. 136 Some have described the new SEMS approach as “methodologically distinct,” and BSEE itself acknowledges that the new approach constitutes a departure from the often-prescriptive OCS regulatory scheme employed in the past. 137

Another shift has taken place among the key players participating in the OCS regulatory scheme. Some participants are new. The DOI created the Offshore Energy Safety Advisory Commission (OESAC) to fill a research and advisory role for BSEE. 138 In 2011, the API created the Center for Offshore Safety (COS) to create SEMS audit documents and auditor certification processes and to otherwise promote OCS safety programs. 139 Other role players remain: the MMS (in its new incarnation

139. See Center for Offshore Safety: Establishing a Culture of Safety, AM. PETROLEUM INST., http://www.centerforoffshoresafety.org/ [https://perma.cc/G6VT-7ZCC] (last visited July 5, 2015); see also Weaver, supra note 90, at 404.
as BOEM, BSEE, and ONRR) and the API (which aside from the DOI is the oldest of all the OCS organizations still actively participating in OCS regulation).140

New cooperative endeavors are also part of the post-Macondo regulatory landscape. The SEMS regulations contain numerous statements about flexibility and incorporate many of the API’s publications by reference, most notably APR RP 75.141 In addition, BSEE and COS will work together to evaluate industry compliance by developing “indicators to gauge industry OCS performance,”142 and a number of the API’s Joint Industry Task Force recommendations have been implemented by BSEE through NTLs.143 Despite the changes to the OCS regulatory scheme, the participants—regulators and industry representatives—are not fundamentally different. And regulators’ adoption of industry recommendations has long been the practice on the OCS.144

CONCLUSION

In contrast to the responses to prior oil spills in the Santa Barbara Channel and Prince William Sound, responses to the Macondo event in the Gulf of Mexico have been more executive and regulatory than legislative. The lack of major congressional action setting forth a new legal framework for the OCS in response to the Macondo event may indicate that little has changed.145 In some ways, it may make little difference whether reforms are implemented via executive and regulatory actions rather than legislatively. The MMS reorganization proposed in the CLEAR Act was instead effected by the Secretary’s executive order, with no real difference in the ultimate result.

Although enactment of major federal legislation in response to an environmental disaster holds the possibility of fundamental change in the regulatory structure, it is also vulnerable to a too-narrow focus on the precipitating event. The failure of a legislature preoccupied with double-hulled tankers to implement SEMS-related reforms in OPA may be an

140. See API History, supra note 5.
142. Revisions to Safety and Environmental Management Systems, 78 Fed. Reg. at 20,427. BSEE and COS will also oversee parallel, and somewhat overlapping, regimes on the OCS. Weaver, supra note 90, at 412–13, 416, 420.
143. See JITF Report; see also Weaver, supra note 65, at 174.
144. See Nat’l Comm’n Report, supra note 1, at 225.
145. See Davis, supra note 42, at 173–74.
example of such a vulnerability.146 Broad regulatory action might avoid this pitfall, especially if it draws from multiple sources and is responsive to a wider range of events. Because the SEMS regulations represent a cumulative reaction to a series of OCS operations failures, they may be less susceptible to the shortcomings of legislative reactions to a single event. Moreover, although the API’s involvement in post-oil spill regulatory responses is not new, the extent to which industry participation is built into the SEMS regulatory processes appears to be greater than in the past. The remaining question will be the extent to which SEMS enables all stakeholders—regulators and industry participants alike—to avoid or minimize offshore disasters.

146. See Nat’l Comm’n Report, supra note 1, at 70.