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SHORTCOMINGS AND SOLUTIONS: REFORMING THE OUTER CONTINENTAL SHELF OIL AND GAS FRAMEWORK IN THE WAKE OF THE *DEEPWATER HORIZON* DISASTER

*Andrew Hartsig**

I. INTRODUCTION

On April 20, 2010, an explosion rocked the BP *Deepwater Horizon* offshore drilling rig in the Gulf of Mexico.¹ The explosion and resulting fire killed eleven crew members, seriously injured sixteen others, and eventually sank the rig.² The explosion also marked the beginning of the “world’s largest accidental release of oil into marine waters.”³ By the time BP effectively stopped the flow of oil on July 15, its Macondo well had discharged approximately 4.9 million barrels of oil.⁴ The *Deepwater Horizon* disaster was a human and environmental tragedy, and it may take years to assess the full scope of the damage to the people, economies, and ecosystems of the Gulf region.

The *Deepwater Horizon* disaster revealed systemic weaknesses in the administration of oil and gas activities on the Outer Continental Shelf

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1. BOB GRAHAM & WILLIAM K. REILLY, Foreword to NATIONAL COMMISSION ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING, at vi (2011).

2. NAT’L COMM’N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING 55 (2011) [hereinafter NATIONAL COMMISSION].

3. Campbell Robertson & Clifford Krauss, *Gulf Spill Is the Largest of Its Kind, Scientists Say*, N.Y. TIMES, Aug. 3, 2010, <http://www.nytimes.com/2010/08/03/us/03spill.html>.

4. *Id.*; see also JANE LUBCHENCO ET AL., BP DEEPWATER HORIZON OIL BUDGET: WHAT HAPPENED TO THE OIL? available at http://www.restorethegulf.gov/sites/default/files/imported_pdfs/posted/2931/Oil_Budget_description_8_3_FINAL.844091.pdf.

(OCS).⁵ It also underscored the difficulty of stopping and responding to a major oil spill, even in the relatively accessible and temperate waters of the Gulf of Mexico.

The National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling (National Commission)—a bipartisan commission created by the President and charged with investigating the disaster and developing options for improving offshore oil and gas practices⁶—identified a series of “weaknesses and . . . inadequacies” in the federal government’s oversight of OCS oil and gas activities.⁷ The National Commission found that these shortcomings affected the full spectrum of OCS activities, from planning for OCS oil and gas lease sales, to administering offshore exploration and development activities, to planning and implementing oil spill response efforts.⁸ The National Commission recommended a broad “overhaul” of “the regulatory policies and institutions used to oversee offshore activities to address these problems.”⁹

This Article discusses the existing framework for federal oversight of OCS oil and gas activities—including oil spill preparation and response, and compliance with the National Environmental Policy Act¹⁰ (NEPA)—and recommends policy and legislative solutions to address the flaws in that framework. Section II provides an overview of the existing statutory, regulatory, and policy structures that govern oil and gas activities, oil spill preparedness, and response on the OCS. Section III reviews some of the initial investigations and administrative and legislative actions that occurred in response to the *Deepwater Horizon* disaster. Section IV identifies and discusses some of the critical shortcomings that remain, and suggests reforms necessary to make OCS oil and gas operations safer and more environmentally responsible. Finally, Section V examines what may be the next frontier—expanded oil and gas operations in OCS waters off Alaska’s North Slope—and

5. The Outer Continental Shelf is defined as “all submerged lands lying seaward and outside of the area of lands beneath navigable waters as defined in [43 U.S.C. § 1301] . . . and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.” 43 U.S.C. § 1331(a) (2006).

6. Exec. Order No. 13543, 75 Fed. Reg. 29,397. 29, 397 (May 26, 2010).

7. NATIONAL COMMISSION, *supra* note 2, at ix.

8. See *generally id.* at 249-91 (identifying problems and recommending options for improving government administration and oversight of OCS oil and gas and spill response activities).

9. *Id.* at 250.

10. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370f (as amended by Pub. L. 111-8, 123 Stat. 729 (March 11, 2009)).

recommends additional measures necessary to protect vulnerable Arctic ecosystems.

II. OVERVIEW OF THE LEGAL FRAMEWORK GOVERNING OCS OIL AND GAS ACTIVITIES AND OIL SPILL RESPONSE

Oil and gas activities on the OCS are controlled by a patchwork of statutes, regulations, and policies. The OCS Lands Act¹¹ (OCSLA) is the principal statute governing offshore oil and gas activity in federal waters. It establishes a multiple-stage framework that provides for oil and gas planning, leasing, exploration, and development and production on the OCS. The Oil Pollution Act of 1990¹² (OPA 90)—including certain amendments to the Clean Water Act¹³—sets forth additional requirements that govern planning and response related to oil spills in marine waters. And as federal agencies plan for and decide whether to approve OCS oil and gas activities, they often trigger the requirements of NEPA. In addition to OCSLA, OPA 90, and NEPA, OCS oil and gas activities may implicate a variety of other federal laws, including but not limited to the Clean Air Act¹⁴, the Marine Mammal Protection Act¹⁵ (MMPA), the Coastal Zone Management Act¹⁶ (CZMA), the Endangered Species Act¹⁷ (ESA), and the Magnuson-Stevens Fishery Conservation and Management Act¹⁸ (MSA). This Section discusses the OCSLA framework for OCS development, specific portions of OPA 90 and the Clean Water Act that pertain to oil spill preparedness and response, and key provisions of NEPA as they relate to federal decision-making about offshore oil and gas activities. It also notes briefly the ways in which OCS oil and gas activities may trigger the requirements of other federal environmental laws.

11. Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331-1356a (2006).

12. Oil Pollution Act of 1990, 33 U.S.C. §§ 2701-2762 (2006).

13. Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (2006).

14. Clean Air Act, 42 U.S.C. §§ 7401-7671q (2006).

15. Marine Mammal Protection Act, 16 U.S.C. §§ 1361-1423h (2006).

16. Coastal Zone Management Act, 16 U.S.C. §§ 1451-1466 (2006).

17. Endangered Species Act, 16 U.S.C. §§ 1531-1544 (2006).

18. Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801-1891d (2006).

A. The Outer Continental Shelf Lands Act

OCSLA was enacted in 1953¹⁹ and amended significantly in 1978.²⁰ Among other things, OCSLA established a national policy with respect to the OCS.²¹ Congress declared that the OCS “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.”²² To that end, Congress gave the Secretary of the Interior the authority to lease areas of the OCS to private industry for oil and gas exploration and development.²³

1. Administration of OCSLA within the Department of the Interior

Since 1982, the Secretary of the Interior has delegated much of his or her authority under OCSLA to the Minerals Management Service (MMS), an agency within the Department of the Interior (DOI).²⁴ MMS promulgated binding regulations that provide additional detail regarding the implementation of OCSLA.²⁵ MMS, however, was not an effective agency. Even before the *Deepwater Horizon* blowout, an Office of Inspector General investigation of one MMS program “revealed an organizational culture lacking acceptance of government ethical standards, inappropriate personal behaviors, and a program without the necessary internal controls in place to prevent future unethical or unlawful behavior.”²⁶ As the National Commission observed, “[p]erhaps because of the cumulative lack of adequate resources, absence of a sustained agency mission, or sheer erosion of professional culture within some offices, MMS came progressively to suffer from serious

19. Outer Continental Shelf Lands Act, Pub. L. 83-212, 67 Stat. 462 (1953) (codified as amended at 43 U.S.C. §§ 1331-1356a (2006)).

20. Outer Continental Shelf Lands Act Amendments, Pub. L. No. 95-372, 92 Stat. 629 (1978) Congress has enacted more limited amendments to OCSLA several times since 1978. See, e.g., Outer Continental Shelf Lands Act of 1985, Pub. L. 99-272, 100 Stat. 82 (1986).

21. 43 U.S.C. § 1332.

22. 43 U.S.C. § 1332(3).

23. See, e.g., 43 U.S.C. § 1344(a) (directing the Secretary of the Interior to administer the provisions of OCSLA relating to the leasing of the Outer Continental Shelf).

24. See NATIONAL COMMISSION, *supra* note 2, at 56 (describing the creation of MMS by then-Secretary of the Interior James Watt in 1982).

25. See, e.g., 30 C.F.R. pts. 250, 251, 260 (2010).

26. U.S. DEP’T OF THE INTERIOR OFFICE OF INSPECTOR GEN., INVESTIGATIVE REPORT: MMS OIL MARKETING GROUP—LAKEWOOD 1 (2008), available at <http://www.doioig.gov/images/stories/reports/pdf/RIKinvestigation.pdf>.

deficiencies of organization and management.”²⁷ These deficiencies were laid bare in the aftermath of the *Deepwater Horizon* disaster.

As described in more detail in Section III(B) below, Secretary of the Interior Ken Salazar made sweeping changes to DOI in the wake of the disaster. As a result of these changes, MMS was abolished and replaced by a transitional agency called the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE).²⁸ When Secretary Salazar’s reorganization program is complete in October 2011, MMS’s responsibilities will be divided among three separate administrative entities operating within DOI: the Bureau of Ocean Energy Management (BOEM), the Bureau of Safety and Environmental Enforcement (BSEE), and the Office of Natural Resources Revenue (ONRR).²⁹ For consistency and to avoid confusion, this Article will in most instances refer to the agency tasked with managing DOI’s OCS oil and gas responsibilities as “BOEM.”

Regardless of its name, the agency that regulates OCS oil and gas operations must implement the provisions of OCSLA. OCSLA establishes a four-stage process for OCS leasing and development: (1) development of a five-year OCS oil and gas leasing program, (2) OCS lease sales, (3) exploration, and (4) development and production. The paragraphs below describe these stages in more detail.

2. Five-year OCS leasing program

At the first stage of the OCSLA process, the Secretary of the Interior must prepare a five-year oil and gas leasing program. “The leasing program shall consist of a schedule of proposed lease sales indicating, as precisely as possible, the size, timing, and location of leasing activity which . . . will best meet national energy needs for the five-year period following its approval or reapproval.”³⁰ OCSLA instructs the Secretary to “select the timing and location of leasing, to the maximum extent practicable, so as to obtain a proper balance between the potential for

27. NATIONAL COMMISSION, *supra* note 2, at 78.

28. SEC’Y OF THE INTERIOR, ORDER NO. 3,302: CHANGE OF THE NAME OF THE MINERALS MANAGEMENT SERVICE TO THE BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION, AND ENFORCEMENT (June 18, 2010).

29. SEC’Y OF THE INTERIOR, ORDER NO. 3,299: ESTABLISHMENT OF THE BUREAU OF OCEAN ENERGY MANAGEMENT, THE BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, AND THE OFFICE OF NATURAL RESOURCES REVENUE (May 19, 2010); *see also* Press Release, BOEM, Salazar, Bromwich Announce Next Steps in Overhaul of Offshore Energy Oversight and Management (Jan. 19, 2011).

30. 43 U.S.C. § 1344(a) (2006).

environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone.”³¹

In crafting the leasing program, OCSLA requires the Secretary to adhere to certain principles. For example, the Secretary must consider “economic, social, and environmental values . . . and the potential impact of oil and gas exploration on other resource values . . . and the marine, coastal, and human environments.”³² When determining the timing and location of lease sales, the Secretary must consider a variety of factors, ranging from industry’s level of interest to the relative environmental sensitivity and marine productivity of different areas of the OCS.³³

The Secretary must “invite and consider suggestions” on the leasing program from interested federal agencies and from the governor of states that may be affected by the program.³⁴ BOEM regulations require the agency to invite and consider public comment from “all interested parties, including the general public.”³⁵ Before approving a leasing program, the Secretary must submit the program, together with any comments received, to the President and Congress.³⁶

The Secretary must review an approved five-year program at least once a year.³⁷ The Secretary may revise or reapprove the leasing program at any time; any significant revision, however, triggers the procedural requirements that are prescribed for the promulgation of a new leasing program.³⁸ If an area of the OCS is not included in the Secretary’s five-year leasing program, that area cannot be leased unless the Secretary amends the program to include the missing area.³⁹ If an area of the OCS is included in the leasing program, that area may be included in a future OCS lease sale, but the Secretary is not obligated to lease the area.

31. *Id.* § 1344(a)(3).

32. *Id.* § 1344(a)(1).

33. *Id.* § 1344(a)(2).

34. *Id.* § 1344(c)(1).

35. 30 C.F.R. § 256.16(a) (2010); *see also* 30 C.F.R. § 256.17(b) (“Comments and recommendations on any aspect of the proposed program may be submitted by a State or local government or other persons to the Secretary within 90 days after the date of its publication in the Federal Register.”).

36. 43 U.S.C. § 1344(d)(2).

37. *Id.* § 1344(e).

38. *Id.*

39. *Id.* § 1344(d)(3).

3. OCS Lease Sales

At the second stage of the OCSLA process, the Secretary of the Interior determines which OCS tracts to lease, and conducts a competitive lease sale to auction OCS oil and gas leases to the highest responsible bidder.⁴⁰ To begin, the director of the leasing agency recommends to the Secretary of the Interior areas identified for environmental analysis and consideration for leasing.⁴¹ In doing so, the director must consult with other federal agencies and consider “environmental information, multiple-use conflicts, resource potential, industry interest and other relevant information.”⁴² The director must also consider comments from “[s]tates and local governments and interested parties in response to calls for information and nominations.”⁴³ It is not uncommon for OCS lease sales to encompass millions or tens of millions of acres.⁴⁴

After approving a notice of proposed lease sale, the Secretary of the Interior must publish it in the Federal Register, send the notice to governors of affected states, and respond to input from the affected governors.⁴⁵ At the auction, companies bid to purchase OCS leases pursuant to bidding requirements established by OCSLA and its implementing regulations.⁴⁶ OCS leases may contain stipulations and conditions developed to mitigate adverse environmental impacts.⁴⁷ In

40. See 43 U.S.C. § 1337(a)(1) (authorizing the Secretary to grant OCS leases).

41. 30 C.F.R. § 256.26(a) (2010).

42. *Id.*

43. *Id.*

44. See, e.g., BUREAU OF OCEAN ENERGY MGMT., ALASKA OCS REGION, LEASE SALES (2011), available at http://alaska.boemre.gov/lease/hlease/LeasingTables/lease_sales.pdf (showing that in recent lease sales in the Arctic OCS, BOEM offered for lease nearly 30 million acres in lease sale 193 in the Chukchi Sea in 2008, about 8.7 million acres in lease sale 202 in the Beaufort Sea in 2007, and about 9.3 million acres in lease sale 195 in the Beaufort Sea in 2005); MINERALS MGMT. SERV., GULF OF MEXICO OCS REGION, GULF OF MEXICO OIL & GAS LEASE OFFERINGS (undated), available at http://www.gomr.boemre.gov/homepg/lseale/swiler/Table_2.PDF (showing that since the early to mid-1980s, most OCS lease sales in the Gulf of Mexico region have offered at least 20 million acres, and lease sale seventy-nine in 1984 offered more than 50 million acres).

45. 43 U.S.C. § 1345(c) (2006); 30 C.F.R. §§ 256.29(c), 256.31(b) & (c).

46. See generally 43 U.S.C. § 1337; see also 30 C.F.R. §§ 256.32(b)–(e), 256.35–.47 (2010).

47. 30 C.F.R. § 256.29(a). In addition to environmental stipulations and conditions, leases contain other limits. For example, the initial lease period is set between five and ten years, 43 U.S.C. § 1337(b)(2); leases must provide for suspension or cancellation of

general, however, a successful bidder gains the right “to explore, develop and produce the oil and gas within the lease area, conditioned on due diligence requirements and the approval of . . . [a] development and production plan.”⁴⁸

4. Exploration

At the third stage, lease operators may apply to explore their leases, usually by drilling one or more exploratory wells.⁴⁹ Before conducting exploration drilling, an operator must submit an exploration plan for the Secretary of the Interior’s approval.⁵⁰

An exploration plan may encompass multiple leases in one OCS region.⁵¹ It must include information about the proposed exploratory activities, including an anticipated schedule, a description of equipment, and “the general location of each well.”⁵² A plan must also demonstrate that exploration activities will conform to relevant laws and regulations, will be safe, will protect the rights of the lessor, will not unreasonably interfere with other OCS uses, and will not cause undue damage to the environment.⁵³ BOEM regulations spell out in some detail the required contents of OCS exploration plans.⁵⁴

Once an operator submits an exploration plan to BOEM, the agency has up to fifteen days to determine whether the plan is “deemed

the lease, *id.* § 1337(b)(5), (6); and leases may also be cancelled at any time if obtained by fraud or misrepresentation. *Id.* § 1337(o).

48. 43 U.S.C. § 1337(b)(4).

49. Instead of or in addition to drilling exploration wells, operators may seek to gain information about OCS areas through the use of seismic testing or other activities. BOEM considers these activities in a process separate from the exploration plan process. *See, e.g.*, 30 C.F.R. pt. 251 (setting forth regulations governing geological and geophysical exploration on the OCS, including seismic marine surveys).

50. *Id.* § 1340(b), (c); *see also* 30 C.F.R. § 250.201(a).

51. 43 U.S.C. § 1340 (c)(1).

52. *Id.* § 1340(c)(3)(A)–(D).

53. 30 C.F.R. § 250.202(a)–(e).

54. *See, e.g., id.* §§ 250.211–250.228 (providing additional information on what exploration plans must include with respect to, *inter alia*, geological and geophysical information (§ 250.214); biological, physical, and socioeconomic information (§ 250.216); solid and liquid waste information (§ 250.217); air emissions (§ 250.218); oil and hazardous substance spills information (§ 250.219); environmental monitoring information (§ 250.221); lease stipulations (§ 250.222); mitigation measures (§ 250.223); support aircraft and vessels (§ 250.224); onshore facilities (§ 250.225); Coastal Zone Management Act information (§ 250.226); and environmental impact analysis (§ 250.227).

submitted.”⁵⁵ BOEM will not deem an exploration plan submitted until the plan’s proponent has corrected all problems or deficiencies in the plan.⁵⁶

After BOEM deems an exploration plan submitted, the agency must send the plan, along with supporting information, to representatives from affected states,⁵⁷ review and evaluate the impacts of the exploration activities,⁵⁸ and prepare environmental documentation pursuant to NEPA.⁵⁹ BOEM may require a plan proponent to change its exploration plan during the review process.⁶⁰ From the time BOEM deems an exploration plan submitted, the agency has just thirty days to approve, require modification of, or disapprove the exploration plan.⁶¹

BOEM must approve an exploration plan if it finds that the plan is consistent with the provisions of OCSLA, the provisions of regulations implementing OCSLA, and the provisions of the underlying lease(s).⁶² The agency may not approve an exploration plan if proposed activities “would probably cause serious harm or damage to life (including fish and other aquatic life), to property, to any mineral (in areas leased or not leased), to the national security or defense, or to the marine, coastal, or human environment” and the activities cannot be modified to avoid that harm or damage.⁶³ If BOEM disapproves a plan, it may cancel the underlying lease and the lessee is entitled to compensation.⁶⁴

Beyond approval of an exploration plan, OCS operators may have to obtain other approvals from BOEM before they begin exploratory drilling.⁶⁵ Operators also may need to obtain permits from other federal agencies. For example, operators may need a discharge permit under the Clean Water Act,⁶⁶ or an emissions permit under the Clean Air Act,⁶⁷

55. *Id.* § 250.231(a).

56. *Id.* § 250.231(b).

57. *Id.* § 250.232(a)(1)(2).

58. 30 C.F.R. § 250.232(b).

59. *Id.* § 250.232(c).

60. *Id.* § 250.232(d).

61. 43 U.S.C. § 1340(c)(1) (2006); *see also* 30 C.F.R. § 250.233.

62. 43 U.S.C. § 1340(c)(1).

63. *Id.* §§ 1334(a)(2)(A)(i), 1340(c)(1)(A) & (B).

64. *Id.* § 1340(c)(1)(B).

65. *See, e.g.*, 30 C.F.R. § 250.281 (listing required approvals for applications for permits to drill, for production safety systems, for new platforms and other structures (or major modifications to platforms and other structures), and for applications to install lease term pipelines).

66. *See, e.g.*, 33 U.S.C. § 1342 (2006) (establishing a permit system for the discharge of pollutants into navigable waters).

from the Environmental Protection Agency (EPA); or they may need a permit for the “incidental take” of marine mammals under the MMPA⁶⁸ from National Oceanic and Atmospheric Administration (NOAA).

5. Development and production

If exploratory drilling reveals economically recoverable oil, an OCS operator may initiate development and production activities. In OCS areas outside the Western Gulf of Mexico, operators must submit a development and production plan before they begin development operations.⁶⁹ In OCS areas within the Western Gulf of Mexico, operators must submit a “development operations coordination document” before they conduct development and production activities.⁷⁰ Operators who plan to use non-conventional production or completion technology must submit a “deepwater operations plan” and “conceptual plan” before they conduct post-drilling installation activities.⁷¹ Finally, before beginning production from development projects located in more than 400 meters of water, operators must submit a “conservation information document.”⁷²

BOEM regulations specify the conditions under which operators must submit each type of plan, as well as the required contents of each plan.⁷³ For example, a development and production plan, or development operations coordination document, must include information similar to that which is required for an exploration plan, but must provide

67. See 42 U.S.C. § 7627 (2006) (providing for requirements to control air pollution from certain OCS sources).

68. See 16 U.S.C. § 1371(a)(5)(D)(i) (2006) (providing for the issuance of permits to allow the incidental take, by harassment, of small numbers of marine mammals).

69. 30 C.F.R. § 250.201(a) (requiring an operator to submit a development and production plan before conducting any development and production activities on a lease or unit in any OCS area other than the Western Gulf of Mexico); see also 43 U.S.C. § 1351(a)(1) (2006) (requiring lessees to submit development and production plans for leases located in OCS areas outside the Gulf of Mexico); *id.* § 1351(l) (allowing the Secretary of the Interior to require submission of development and production plans for OCS areas in the Gulf of Mexico that are adjacent to Florida).

70. 30 C.F.R. § 250.201(a).

71. *Id.*; see also *id.* § 250.286(b) (noting that the Deepwater Operations Plan process consists of both a Deepwater Operations Plan and a Conceptual Plan).

72. *Id.* § 250.201(a).

73. See *id.* §§ 250.241–250.285 (providing regulatory process relating to development and production plans and development operations coordination documents); *id.* §§ 250.286–250.295 (providing regulatory process relating to deepwater operations plans); *id.* §§ 250.296–250.299 (providing regulatory process relating to conservation information documents).

additional information to address the increased scale of operations.⁷⁴ A deepwater operations plan must provide a variety of information, including: a description and schematic of a typical wellbore, casing, and completion; details on mooring, stationkeeping, drilling, completion, and riser systems; and pipeline information.⁷⁵ A conceptual plan must provide information such as an overview of the development concept and the distance of each proposed well to the production platform.⁷⁶ A conservation information document must discuss the development of a reservoir; contain well log data and reservoir parameters; include structure maps; and provide other information.⁷⁷

Assuming a development and production plan or development operations coordination document satisfies all regulatory requirements, BOEM must deem the plan or document submitted within twenty-five working days of submission to the agency.⁷⁸ Once a plan or document is “deemed submitted,” BOEM must take certain actions, including sending the plan or document to certain public officials and agencies, making the plan or document available to the general public, and initiating an internal review process.⁷⁹ BOEM must also evaluate the environmental impacts of the activities described in the plan or document by preparing documentation pursuant to NEPA.⁸⁰

BOEM must make a decision on a “deemed submitted” development and production plan, or development operations coordination document, within sixty calendar days after either the close of required comment periods, the day the final environmental impact statement—if any—is released or adopted, or the date of the last amendment of a development operations coordination document.⁸¹ BOEM may require modification if the plan or document fails to meet all requirements, and it may disapprove the plan if specific conditions apply.⁸² BOEM must approve a development and production plan or development operations coordination document if it complies with all applicable requirements.⁸³ As with exploration drilling activities, operators may also be required to

74. *Id.* §§ 250.241–250.262.

75. *Id.* § 250.292 (2010).

76. *Id.* § 250.289.

77. *Id.* § 250.297.

78. *Id.* § 250.266(a).

79. *Id.* § 250.267.

80. *Id.* § 250.269.

81. *Id.* § 250.270(a)(1) (2010).

82. *Id.* §§ 250.270(b), 250.271.

83. *Id.* § 250.270(b)(1).

secure additional permits from BOEM and/or other agencies before they commence development and production drilling activities.

B. Spill Planning, Response, and Liability Under OPA 90 and the Clean Water Act

OPA 90—including its amendments to the Clean Water Act—is the primary statute governing issues of planning, prevention, response, and liability for oil spills in marine waters.⁸⁴ Congress enacted OPA 90 in the wake of the *Exxon Valdez* oil spill.⁸⁵ The statute expanded the federal government's ability to prepare for and respond to oil spills on or affecting U.S. waterways and coastlines by establishing new requirements and by amending extensively the federal Clean Water Act. Among other things, OPA 90 attempted to strengthen and clarify the federal government's role in oil spill planning, preparedness, and response. It also expanded existing liability provisions within the Clean Water Act.

1. Framework for Oil Spill Planning and Response

OPA 90's amendments to the Clean Water Act established a multi-tier framework for planning for, and responding to, oil spills. At the broadest tier, a National Contingency Plan "provide[s] for efficient, coordinated, and effective action to minimize damage from oil and hazardous substance discharges, including containment, dispersal, and removal of oil and hazardous substances."⁸⁶ The National Contingency Plan is prepared by a multi-agency team led by EPA,⁸⁷ and must establish procedures and standards for responding to worst-case oil spill scenarios.⁸⁸

84. See, e.g., NATIONAL COMMISSION, *supra* note 2, at 83 ("[T]he Oil Pollution Act of 1990, supplemented by a Presidential Executive Order, imposes a panoply of oil-spill planning, preparedness, and response requirements on fixed and floating facilities engaged in oil and gas exploration, development, and production on the outer continental shelf." (citations omitted)).

85. See JONATHAN L. RAMSEUR, CONG. RESEARCH SERV., RL 33705, OIL SPILLS IN U.S. COASTAL WATERS: BACKGROUND, GOVERNANCE, AND ISSUES FOR CONGRESS 9 (2009) (noting that Congress enacted OPA 90 in response to shortcomings in the response to the *Exxon Valdez* oil spill).

86. 33 U.S.C. § 1321(d)(1), (2) (2006).

87. 40 C.F.R. §§ 300.2, 300.110, 300.175 (2010).

88. 33 U.S.C. § 1321(d)(2)(J) (2006).

Below the national level, regional response teams are responsible for planning and coordinating preparedness and response at the regional level.⁸⁹ Regional response teams include representatives from federal agencies as well as state and local government representatives.⁹⁰ These teams facilitate the “development and coordination of preparedness activities before a response action is taken,” and help coordinate “assistance and advice” during response actions.⁹¹ They also develop Regional Contingency Plans, which are designed “to coordinate timely, effective response by various federal agencies and other organizations.”⁹² Regional response teams help to provide oversight and consistency for area- and facility-specific response plans within the region.⁹³

Area committees, comprised of federal, state, and local agencies, operate below the regional level.⁹⁴ Area Committees are tasked with preparing Area Contingency Plans.⁹⁵ These plans must, among other things, “be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area.”⁹⁶ They must also describe areas of special economic or environmental importance, list equipment available to respond to a spill, compile a list of local spill response experts, and describe how the Area Contingency Plan is integrated with other spill response plans.⁹⁷

Finally, at the narrowest tier are facility-specific spill response plans.⁹⁸ Unlike the response plans discussed above, facility response plans are prepared by the owners or operators of those facilities, such as oil and gas companies.⁹⁹ In general, vessels and facilities cannot handle, store, or transport oil if they do not have a plan approved by (or submitted to) the appropriate agency.¹⁰⁰ Facility response plans must

89. 40 C.F.R. § 300.115(a) (2010).

90. *Id.*

91. *Id.* § 300.115(a)(1).

92. *Id.* § 300.210(b).

93. *Id.* § 300.115(a)(2).

94. 33 U.S.C. § 1321(j)(4)(A), (B) (2006); *see also* 40 C.F.R. § 300.5 (2010) (defining “Area Committee”).

95. 33 U.S.C. § 1321(j)(4)(B)(i).

96. *Id.* § 1321(j)(4)(C)(i); *see also* 40 C.F.R. § 300.210(c) (2010).

97. 33 U.S.C. § 1321(j)(4)(C) (2006); *see also* 40 C.F.R. § 300.210(c) (2010).

98. 33 U.S.C. § 1321(j)(5) (2006); *see also* 40 C.F.R. § 300.211 (2010).

99. 33 U.S.C. § 1321(j)(5)(A)(i) (2006); *see also* 30 C.F.R. § 254.1(a) (2010) (“If you are the owner or operator of an oil handling, storage, or transportation facility, and it is located seaward of the coast line, you must submit a spill-response plan to MMS for approval.”).

100. 33 U.S.C. § 1321(j)(5)(F) (2006).

include “a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance.”¹⁰¹ In addition, among other requirements, facility response plans must be consistent with the national and area contingency plans for the given region, must specify the private personnel and equipment that will be available to respond to a worst-case spill, and must “describe the training, equipment testing, periodic unannounced drills, and response actions” that will be carried pursuant to the plan.¹⁰² BOEM has promulgated regulations that govern facility response plans for offshore facilities, such as drilling rigs and platforms.¹⁰³

2. Agency Jurisdiction

Under the OPA 90 framework, the party or parties that cause an oil spill—called “responsible parties”¹⁰⁴—are primarily responsible for cleaning up the spill.¹⁰⁵ However, federal agencies also play key roles. The National Oil and Hazardous Substances Pollution Contingency Plan and Executive Orders and memoranda of understanding establish the jurisdictions of the agencies.¹⁰⁶ For example, the U.S. Coast Guard has primary oil spill response authority offshore; it is responsible for coordinating the efforts of federal, state, and private parties and overseeing spill cleanup efforts.¹⁰⁷ NOAA’s Office of Response and

101. *Id.* § 1321(j)(5)(A)(i).

102. *Id.* § 1321(j)(5)(D)(iv).

103. *See* 30 C.F.R. pt. 254 (2010); *see also* 40 C.F.R. § 300.211(b) (2010) (noting BOEM regulations apply to offshore facilities).

104. 33 U.S.C. § 2701(32) (2006) (defining “responsible party”).

105. *See* 40 C.F.R. pt. 300, app. E, § 2.3(b) (“Cleanup responsibility for an oil discharge immediately falls on the responsible party.”).

106. *See* Exec. Order No. 12,777, 56 Fed. Reg. 54,757 (Oct. 18, 1991); *see also* Memorandum of Understanding Among the Secretary of the Interior, Secretary of Transportation, and Administrator of the Environmental Protection Agency, App. B, 40 C.F.R. Part 112, app. B.

107. *See* 40 C.F.R. § 300.175(b)(1) (2010) (noting that the Coast Guard provides coordination of cleanup activities in coastal areas); 40 C.F.R. pt. 300, app. E § 3.3.1 (providing that the Coast Guard will provide On-Scene Coordinators “for oil discharges, including discharges from facilities and vessels under the jurisdiction of another federal agency, within or threatening the coastal zone”). The Environmental Protection Agency has primary response authority for inland spills. *Id.*

Restoration provides scientific analysis and consultation during spill-response activities.¹⁰⁸

Under existing law, the federal agencies responsible for responding to an oil spill are not necessarily the agencies responsible for overseeing planning and preparation for an oil spill. For example, even though the Coast Guard is responsible for overseeing oil spill response efforts in offshore areas, BOEM regulates oil spill planning and preparedness for offshore oil and gas facilities and offshore production pipelines.¹⁰⁹

3. Oil Spill Liability

OPA 90 consolidated and broadened existing liability provisions to establish a new liability structure for oil spills.¹¹⁰ Under that structure, responsible parties are liable for removal costs and damages associated with the discharge or threat of discharge of oil into navigable waters, shorelines, or the Exclusive Economic Zone.¹¹¹ A responsible party is liable for all cleanup costs incurred by both government agencies and private parties.¹¹² Under OPA 90, responsible parties are also liable for a broad range of damages including injury to natural resources, loss of real or personal property, loss of subsistence use of natural resources, lost revenues resulting from destruction of property or natural resource injury, lost profits resulting from property loss or natural resource injury, and costs of providing extra public services during or after spill response.¹¹³

OPA 90's liability scheme established caps for cleanup costs and other damages (except in limited situations such as gross negligence or willful misconduct).¹¹⁴ For example, liability for offshore facilities is capped at \$75 million; liability for onshore facilities and deepwater ports

108. 40 C.F.R. § 300.175(b)(7); *see also* 40 C.F.R. pt. 300, app. E, § 6.4.1. "The Office provides comprehensive solutions to environmental hazards caused by oil, chemicals, and marine debris." *Office of Response and Restoration*, NOAA NAT'L OCEAN SERVICE, <http://response.restoration.noaa.gov/#2> (last visited March 28, 2011).

109. *See* 30 C.F.R. pt. 254 (2010) (regulating oil spill response planning requirements for offshore facilities).

110. *See, e.g.*, RAMSEUR, *supra* note 85, at 11.

111. 33 U.S.C. § 2702(a) (2006).

112. *Id.* § 2702(b)(1).

113. *Id.* § 2702(b)(2).

114. *Id.* § 2704.

is limited to \$350 million.¹¹⁵ Defenses to liability may include acts of God, acts of war, and acts or omissions of a third party.¹¹⁶

After the *Exxon Valdez* oil spill, Congress imposed a five-cent-per-barrel tax on the oil industry to support the already-existing Oil Spill Liability Trust Fund, but the five-cent rate ended on December 31, 1994.¹¹⁷ In April 2006, the tax resumed as required by the Energy Policy Act of 2005.¹¹⁸ The Emergency Economic Stabilization Act of 2008 increased the tax rate to eight cents per barrel through 2016 and nine cents per barrel in 2017.¹¹⁹ Monies from the Oil Spill Liability Trust Fund may be used to pay for a limited number of expenses including, but not limited to, costs associated with uncompensated removal and damage costs, response to and removal of oil spills, assessment of damage to natural resources and development and implementation of plans to restore or replace those resources, and loss of government revenue.¹²⁰ However, payout from the Oil Spill Liability Trust Fund cannot exceed \$1 billion for “any single incident,” and natural resource damage assessments and claims relating to any single incident cannot exceed \$500 million.¹²¹

C. *The National Environmental Policy Act*

NEPA is the “basic national charter for protection of the environment.”¹²² It is designed to ensure that federal decision-makers “will have available, and will carefully consider, detailed information concerning significant environmental impacts” and that “relevant information will be made available” to the public.¹²³ While it is often described as a procedural statute, “NEPA plays a unique role in injecting consideration of environmental effects in what otherwise would be single

115. *Id.* § 2704(a)(3), (4).

116. *Id.* § 2703(a).

117. *See* Omnibus Budget Reconciliation Act of 1989, Pub. L. No. 101-239, § 7505(a), (b), 103 Stat. 2106, 2363, (1989) (amending 26 U.S.C. § 4611 to provide that the five-cent-per-barrel tax was in effect after Jan. 1, 1990 and before Jan. 1, 1995).

118. Energy Policy Act of 2005, Pub. L. No. 109-58, § 1361, 119 Stat. 594, 1058–59 (2005) (reinstating tax to fund the Oil Spill Liability Trust Fund beginning April 1, 2006).

119. Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, § 405(a)(1), (b), 122 Stat. 3765, 3860–61 (2008) (increasing tax rates and providing that the tax will not apply after Dec. 31, 2017).

120. 33 U.S.C. § 2712(a) (2006).

121. 26 U.S.C. § 9509(c)(2)(A) (2006).

122. 40 C.F.R. § 1500.1(a) (2010).

123. *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 768 (2004) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989)).

resource-driven decisions.”¹²⁴ Federal agency actions—such as issuance of OCS oil and gas leasing programs, issuance of OCS leases, and decisions to approve site-specific OCS oil and gas activities—often trigger NEPA’s environmental analysis requirements.

Broadly speaking, NEPA provides for three levels of environmental analysis.¹²⁵ First, if a proposed agency action is a “major federal action [] significantly affecting the quality of the human environment,” NEPA requires federal agencies to prepare a detailed statement on the environmental impacts of the proposed action.¹²⁶ This detailed statement, called an Environmental Impact Statement (EIS),¹²⁷ should “provide full and fair discussion of significant environmental impacts and . . . inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.”¹²⁸ When evaluating “reasonably foreseeable” environmental impacts, an EIS must consider “impacts which have catastrophic consequences, even if their probability of occurrence is low.”¹²⁹ While agencies generally prepare EISs for specific actions, such as a particular oil and gas lease sale, they may also prepare “programmatic” EISs to evaluate the potential impacts of broader agency actions, including the development of new regulations or programs.¹³⁰ To avoid duplication and to facilitate greater focus “on the issues specific to the subsequent action,” NEPA regulations encourage federal agencies to “tier” EISs such that EISs for later, narrower actions incorporate prior, broader-scale EISs by reference.¹³¹ While an EIS does not require the agency to adopt any particular alternative, it should inform the agency decisionmaking process.¹³² The EIS process leads to a “Record of

124. Janis Searles, *National Environmental Policy Act*, in *OCEAN AND COASTAL LAW AND POLICY* 181, 181-82 (Donald C. Baur, Tim Eichenberg & Michael Sutton, eds., 2008) (discussing programmatic EISs).

125. See COUNCIL ON ENVTL. QUALITY, REPORT REGARDING THE MINERALS MANAGEMENT SERVICE’S NATIONAL ENVIRONMENTAL POLICY ACT POLICIES, PRACTICES, AND PROCEDURES AS THEY RELATE TO OUTER CONTINENTAL SHELF OIL AND GAS EXPLORATION AND DEVELOPMENT 8 (2010).

126. 42 U.S.C. § 4332(C)(i) (2006).

127. 40 C.F.R. § 1508.11 (2010).

128. *Id.* § 1502.1.

129. *Id.* § 1502.22(b)(1).

130. See *id.* § 1500.4(i) (allowing the use of “program, policy, or plan environmental impact statements”); see also Searles, *supra* note 124, at 187-88 (discussing programmatic EISs).

131. *Id.* § 1502.20; see also *id.* § 1500.4(i) (discussing tiering from programmatic EISs).

132. *Id.* § 1502.14.

Decision” in which the agency must state its final decision, identify the alternatives it considered, discuss how it balanced various factors, state whether the final decision avoided or minimized environmental harm, and—where applicable—adopt a monitoring and enforcement program to facilitate mitigation.¹³³

Second, if an agency action is of a type that does not normally require an EIS, an agency may choose to prepare a less rigorous analysis, called an Environmental Assessment (EA), to determine whether it is necessary to prepare an EIS.¹³⁴ Agencies may also prepare EAs to “assist agency planning and decisionmaking.”¹³⁵ An EA is “a concise public document” that must contain brief discussions of the need for, alternatives to, and environmental impacts of, the proposed agency action.¹³⁶ If an EA reveals that a proposed action will have significant impacts on the environment, the agency must prepare an EIS.¹³⁷ If not, the agency may produce a Finding of No Significant Impact (FONSI) that explains briefly why the proposed action will not have significant environmental impacts.¹³⁸

Third, NEPA regulations allow federal agencies to identify specific categories of actions—called “categorical exclusions”—that “do not individually or cumulatively have a significant effect on the human environment.”¹³⁹ If an action is categorically excluded, an agency need not prepare an EIS or EA for that action.¹⁴⁰ When federal agencies identify categorical exclusions, they must “provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.”¹⁴¹

The Court of Appeals for the District of Columbia has observed that the scope of BOEM’s NEPA analyses for OCS oil and gas actions may differ, depending on the stage of the OCSLA process that the agency is analyzing.¹⁴² The court noted that BOEM “may issue a broader EIS at

133. *Id.* § 1505.2.

134. *Id.* §§ 1501.4, 1508.9.

135. *Id.* § 1501.3(b).

136. *Id.* § 1508.9.

137. 42 U.S.C. § 4332(C) (2006); *see also* 40 C.F.R. §§ 1508.18 (2010) (defining “major federal action”); 1508.27 (defining “significantly”); 1508.3; 1508.8 (defining “affecting” and “effects”); 1508.14 (defining “human environment”).

138. 40 C.F.R. § 1508.13 (2010).

139. *Id.* § 1508.4.

140. *Id.*

141. *Id.*

142. *Ctr. for Biological Diversity v. Dep’t of the Interior*, 563 F.3d 466 (D.C. Cir. 2009).

the earlier ‘need and site selection’ stage of a program, and issue subsequent, more detailed environmental impact statements at the program’s later, more site-specific stage.’¹⁴³ In practice, BOEM has prepared broad, programmatic EISs when it issues a five-year oil and gas leasing program or a lease sale that covers millions of acres of the OCS.¹⁴⁴ The agency has analyzed decisions about site-specific oil and gas activities, such as approval of exploration plans, in EAs.¹⁴⁵ In many cases, BOEM has not prepared EISs or EAs for site-specific OCS activities because it created and applied categorical exclusions for these activities.¹⁴⁶

D. Other Environmental Statutes

A number of other statutes in addition to OCSLA, OPA 90, and NEPA may be implicated at various stages of the OCS oil and gas process. For example, proposed OCS actions may trigger the need to prepare a consistency determination pursuant to the CZMA.¹⁴⁷ If an agency’s OCS action may affect a species listed under the ESA, it will likely require consultation with NOAA or the U.S. Fish and Wildlife Service as to the impacts of the action.¹⁴⁸ Similarly, proposed OCS actions may require consultation with NOAA pursuant to the MSA.¹⁴⁹

143. *Id.* at 474 (citing 40 C.F.R. § 1508.28).

144. *See, e.g.*, MINERALS MGMT. SERV., 1 OUTER CONTINENTAL SHELF OIL & GAS LEASING PROGRAM: 2007–2012 FINAL ENVIRONMENTAL IMPACT STATEMENT (2007) [hereinafter 2007–2012 FIVE-YEAR PROGRAM FEIS] (analyzing nationwide leasing program); MINERALS MGMT. SERV., 1 CHUKCHI SEA PLANNING AREA OIL AND GAS LEASE SALE 193 AND SEISMIC SURVEYING ACTIVITIES IN THE CHUKCHI SEA, FINAL ENVIRONMENTAL IMPACT STATEMENT I-2 (2007) [hereinafter LEASE SALE 193 FEIS] (analyzing a lease sale covering about 34 million acres).

145. *See generally, e.g.*, MINERALS MGMT. SERV., ENVIRONMENTAL ASSESSMENT: SHELL OFFSHORE INC. 2010 OUTER CONTINENTAL SHELF LEASE EXPLORATION PLAN FOR CAMDEN BAY, ALASKA, BEAUFORT SEA LEASES (2009) [hereinafter 2009 BEAUFORT EA]; MINERALS MGMT. SERV., ENVIRONMENTAL ASSESSMENT: SHELL GULF OF MEXICO, INC. 2010 EXPLORATION DRILLING PROGRAM, BURGER, CRACKERJACK, AND SW SHOEBILL PROSPECTS CHUKCHI SEA OUTER CONTINENTAL SHELF (2009) [hereinafter 2009 CHUKCHI EA].

146. *See* COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 25 (describing BOEM’s application of categorical exclusions in the Gulf of Mexico).

147. *See* 16 U.S.C. § 1456(c) (2006) (providing for determinations to facilitate consistency with State coastal management programs).

148. *See id.* § 1536(a)(2) (providing for interagency consultation with respect to species listed under the ESA).

149. *See id.* § 1855(b)(2) (providing for interagency consultation with respect to essential fish habitat).

As noted above, drill rigs and associated emissions sources may trigger the need for an emissions permit from EPA pursuant to the Clean Air Act.¹⁵⁰ Similarly, a drill rig's discharges into marine waters may require a Clean Water Act permit from EPA.¹⁵¹ OCS activities that could result in the harassment of marine mammals may require an incidental harassment authorization from NOAA.¹⁵² Other statutes may come into play, as well. The statutes listed in this paragraph are not the focus of this Article. Nonetheless, they may affect proposed OCS activities in important ways.

III. INITIAL REACTIONS TO THE DEEPWATER HORIZON DISASTER: INVESTIGATIONS AND REFORMS

Shortly after the April 20, 2010 blowout and explosion on the *Deepwater Horizon*, it was obvious that the scale of the disaster was unprecedented, that it would have significant impacts to the Gulf of Mexico's people, economies, and wildlife, and that those impacts would be both immediate and long-lasting. Decision-makers in the executive branch and in Congress acknowledged that governance of OCS oil and gas activities needed to change. In the days and months that followed the blowout, President Obama, Secretary of the Interior Salazar, and others launched investigations—some broad, others narrow—to examine various aspects of the disaster. At DOI, Secretary of the Interior Salazar launched a program to restructure the Department's oversight of the industry and initiated other targeted reforms. Legislators in the 111th Congress crafted, but did not pass, legislation designed to address problems in the existing law. The following Section reviews some of these efforts.

A. Investigations and Studies Related to the Deepwater Horizon Disaster

As noted at the outset of this Article, on May 21, 2010, President Obama created the "National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling."¹⁵³ He directed the National

150. See 42 U.S.C. § 7627 (2006) (providing for requirements to control air pollution from certain OCS sources).

151. See, e.g., 33 U.S.C. § 1342 (2006) (establishing a permit system for the discharge of pollutants into navigable waters).

152. See 16 U.S.C. § 1371(a)(5)(D) (2006) (providing for the issuance of permits to allow the incidental take, by harassment, of small numbers of marine mammals).

153. Exec. Order No. 13,543, 75 Fed. Reg. 29,397, 29,397 (May 26, 2010).

Commission “to examine the relevant facts and circumstances concerning the root causes of the Deepwater Horizon oil disaster; [and] develop options for guarding against, and mitigating the impact of, oil spills associated with offshore drilling, taking into consideration the environmental, public health, and economic effects of such options”¹⁵⁴ The National Commission issued its report and recommendations on January 11, 2011.¹⁵⁵ Although the National Commission’s recommendations may eventually spur administrative or legislative change, the recommendations themselves have no immediate effect on existing law, regulation, or policy.

At DOI, Secretary Salazar initiated an internal study of the Department’s practices related to OCS oil and gas activities. On April 30, 2010, he created an OCS Safety Oversight Board.¹⁵⁶ Among other things, Secretary Salazar tasked the Oversight Board with “making recommendations to improve and strengthen the Department’s overall management, regulation, and oversight of OCS operations.”¹⁵⁷ On September 1, 2010, the Oversight Board issued a report that included a suite of recommendations for reform.¹⁵⁸ Three days later, the Director of BOEM released an “implementation plan” that described how BOEM would address—or was already addressing—the Oversight Board’s recommendations.¹⁵⁹

Interior Secretary Salazar initiated additional studies relating to the *Deepwater Horizon* disaster as well. He asked DOI’s Office of Inspector General to evaluate BOEM’s practices.¹⁶⁰ The Office of Inspector General cooperated with the Oversight Board and, building on the

154. *Id.*

155. *See generally* NATIONAL COMMISSION, *supra* note 2.

156. SEC’Y OF INTERIOR, ORDER NO. 3,298: ESTABLISHMENT OF THE OUTER CONTINENTAL SHELF SAFETY OVERSIGHT BOARD (Apr. 30, 2010).

157. *Id.*

158. *See generally* U.S. DEP’T OF THE INTERIOR OUTER CONTINENTAL SHELF SAFETY OVERSIGHT BD., REPORT TO SECRETARY OF THE INTERIOR KEN SALAZAR (Sept. 1, 2010), *available at* <http://www.noia.org/website/download.asp?id=40069>.

159. BUREAU OF OCEAN ENERGY MGMT., REGULATION, AND ENFORCEMENT, IMPLEMENTATION PLAN IN RESPONSE TO THE OUTER CONTINENTAL SHELF SAFETY OVERSIGHT BOARD’S SEPTEMBER 1, 2010 REPORT TO THE SECRETARY OF THE INTERIOR (Sept. 4, 2010), *available at* <http://www.interior.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=43676>. *See also infra* Part III.B.

160. OFFICE OF INSPECTOR GEN., U.S. DEP’T OF THE INTERIOR, CR-EV-MMS-0015-2010, A NEW HORIZON: LOOKING TO THE FUTURE OF THE BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT 1 (Dec. 2010), *available at* <http://www.doiig.gov/images/stories/reports/pdf/A%20New%20Horizon%20Public.pdf>.

recommendations of the Oversight Board, issued its own final report in December 2010.¹⁶¹ In addition to the Oversight Board and Office of Inspector General investigations, Secretary Salazar commissioned a more targeted study by the National Academy of Engineering—focused on technical issues—to analyze the causes of the *Deepwater Horizon* disaster to help identify “corrective steps” necessary “to address the mechanical failures underlying the accident.”¹⁶² The National Academy released an interim letter to Secretary Salazar on November 16, 2010.¹⁶³

DOI also participated in at least two joint studies. First, on April 21, 2010 the U.S. Coast Guard (Coast Guard) and BOEM began a joint investigation of the causes of the *Deepwater Horizon* disaster.¹⁶⁴ The investigators “have the power to issue subpoenas, hold public hearings, call witnesses, and take other steps” to help them determine the cause of the disaster.¹⁶⁵ As of this writing, the joint investigation is ongoing.¹⁶⁶ Second, on May 14, 2010, Secretary Salazar and Council on Environmental Quality Chair Nancy Sutley announced a joint review that focused on BOEM’s implementation of NEPA.¹⁶⁷ Working with BOEM, the Council on Environmental Quality issued a final report and recommendations on August 16, 2010.¹⁶⁸

In addition to the foregoing studies, the Coast Guard prepared an “Incident Specific Preparedness Review” designed “to examine the

161. *Id.*

162. Press Release, Dep’t of the Interior, Salazar Launches Safety and Env’tl. Prot. Reforms to Toughen Oversight of Offshore Oil and Gas Operations para. 8 (May 11, 2010), available at <http://www.doi.gov/news/pressreleases/Salazar-Launches-Safety-and-Environmental-Protection-Reforms-to-Toughen-Oversight-of-Offshore-Oil-and-Gas-Operations.cfm?renderforprint=1&>.

163. Letter from Donald C. Winter, Nat’l Acad. of Eng’g and Nat’l Research Council of the Nat’l Acads., to Ken Salazar, Sec’y of the Interior (Nov. 16, 2010), available at http://www.nationalacademies.org/includes/DH_Interim_Report_final.pdf.

164. Press Release, Dep’t of Homeland Sec., Sec’y Napolitano and Sec’y Salazar Launch Full Investigation of Deepwater Horizon Incident in the Gulf of Mex. (April 27, 2010), available at http://www.dhs.gov/ynews/releases/pr_1272395702575.shtm; see also Press Release, Dep’t of the Interior, Salazar and Napolitano Launch Full Investigation of Deepwater Horizon Incident in the Gulf of Mex. (April 27, 2010), available at <http://www.doi.gov/news/pressreleases/SECRETARY-NAPOLITANO-AND-SECRETARY-SALAZAR-LAUNCH-FULL-INVESTIGATION-OF-DEEPWATER-HORIZON-INCIDENT-IN-THE-GULF-OF-MEXICO.cfm?renderforprint=1&>.

165. Press Release, Dep’t of Homeland Security, *supra* note 164, para. 5.

166. See DEEPWATER HORIZON JOINT INVESTIGATION, <http://www.deepwaterinvestigation.com/go/site/3043/> (last visited Feb. 16, 2011) (official site).

167. COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 1.

168. *Id.*

implementation and effectiveness of the preparedness and response to the BP Deepwater Horizon incident as it related to the National Contingency Plan, Area Contingency Plans, and other oil spill response plans.”¹⁶⁹ The Coast Guard distributed its final report in March of 2011.¹⁷⁰ Finally, the U.S. Chemical Safety and Hazard Investigation Board (Chemical Safety Board) launched an examination of the *Deepwater Horizon* disaster that “include[s] an examination of key technical factors, the safety cultures involved, and the effectiveness of relevant laws, regulations, and industry standards.”¹⁷¹ As of this writing, the Chemical Safety Board’s investigation is ongoing.

In addition to triggering a considerable number of studies and investigations, the *Deepwater Horizon* disaster also gave rise to change, both actual and attempted. The following sections focus on reforms implemented by DOI and reforms considered—but not enacted—by Congress.

B. Reforms at the Department of the Interior

Secretary Salazar began to implement reforms at DOI soon after the *Deepwater Horizon* blowout and explosion. Perhaps the most visible of these changes was the dissolution of MMS and the creation of three separate administrative agencies within DOI to take its place. Secretary Salazar also instituted a temporary moratorium on deepwater drilling, tightened safety requirements for OCS operators, and restricted the use of categorical exclusions for deepwater exploration drilling.

169. U.S. COAST GUARD, BP DEEPWATER HORIZON OIL SPILL INCIDENT SPECIFIC PREPAREDNESS REVIEW 1 (2011), *available at* <http://www.uscg.mil/foia/docs/DWH/BPDWH.pdf>.

170. *See* Memorandum from R.J. Papp, Jr., Commandant, U.S. Coast Guard, on Final Action Memorandum for the Incident Specific Preparedness Review of the Deepwater Horizon Oil Spill (March 18, 2011), *available at* <http://www.uscg.mil/foia/docs/DWH/BPDWH.pdf>.

171. *See* Letter from John S. Bresland, Chairman, U.S. Chem. Safety and Hazard Investigation Bd., to Henry A. Waxman, Chairman, U.S. House Comm. on Energy and Commerce and Bart Stupak, Chairman, U.S. House Comm. on Energy and Commerce and Subcomm. on Oversight and Investigations (June 18, 2010), *available at* http://www.csb.gov/assets/news/document/Response_to_Rep_Waxman_Stupak_-_BP_Transocean_June_18_2010.pdf.

1. Restructuring DOI's Oversight of OCS Oil and Gas Activities

Less than one month after the blowout and explosion on the *Deepwater Horizon*, Secretary Salazar announced his intent to abolish the MMS and distribute its responsibilities among three separate agencies within DOI.¹⁷² Secretary Salazar undertook the restructuring project to resolve what he described as “conflicting missions” within MMS.¹⁷³ By creating three distinct agencies, the Secretary hoped to “improve the management, oversight, and accountability of activities on the Outer Continental Shelf; ensure a fair return to the taxpayer from royalty and revenue collection and disbursement activities; and provide independent safety and environmental oversight and enforcement of offshore activities.”¹⁷⁴

Implementation of the restructuring program took place in phases. First, on June 18, 2010 Secretary Salazar changed the name of MMS to BOEMRE.¹⁷⁵ BOEMRE was a transitional agency tasked with “exercis[ing] all authorities previously vested in the MMS.”¹⁷⁶ Second, on October 1, 2010 Secretary Salazar established the Office of Natural Resources Revenue (ONRR).¹⁷⁷ Among other things, ONRR assumed responsibility for the management of revenue from offshore leases.¹⁷⁸ Third, on January 19, 2011, Secretary Salazar announced that BOEMRE's remaining responsibilities would be divided between two new Bureaus within DOI: BOEM would begin to carry out the Department's OCS resource development and energy management functions, while BSEE would begin to oversee the Department's OCS safety and enforcement functions.¹⁷⁹ More specifically, BOEM will

172. ORDER NO. 3,299, *supra* note 29.

173. Press Release, Dep't of the Interior, Salazar Divides MMS's Three Conflicting Missions: Establishes Independent Agency to Police Offshore Energy Operations para. 2 (May 19, 2010), *available at* <http://www.doi.gov/news/pressreleases/Salazar-Divides-MMSs-Three-Conflicting-Missions.cfm?renderforprint=1&>.

174. ORDER NO. 3,299, *supra* note 29, at 1.

175. ORDER NO. 3,302, *supra* note 28.

176. *Id.* at 1.

177. SEC'Y OF THE INTERIOR, ORDER NO. 3,306: ORGANIZATIONAL CHANGES UNDER THE ASSISTANT SECRETARY—POLICY, MANAGEMENT AND BUDGET (Oct. 1, 2010), *available at* <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=46124>.

178. *Id.* at 1.

179. *See* Press Release, Dep't of the Interior, Salazar, Bromwich Announce Next Steps in Overhaul of Offshore Energy Oversight and Management paras. 7-8 (Jan. 19, 2011), *available at* <http://www.doi.gov/news/pressreleases/Salazar-Bromwich-Announce-Next->

carry out planning, leasing, environmental studies, NEPA analysis, resource evaluation, and other related functions, while BSEE will “enforce safety and environmental regulations.”¹⁸⁰ DOI expects to complete the implementation of its reorganization program by October 1, 2011.

2. Temporary Moratorium on Deepwater Drilling

In addition to instituting internal reorganizations within DOI, Secretary Salazar temporarily halted certain on-water drilling activities in the wake of the *Deepwater Horizon* disaster. On May 27, 2010, Secretary Salazar ordered a six-month moratorium that prohibited new OCS operators from drilling new deepwater wells and required deepwater wells that were in the process of being drilled to halt operations “at the first safe stopping point.”¹⁸¹

Some oil and gas service providers affected by the prohibition challenged the moratorium in federal district court and requested that the court issue a preliminary injunction to enjoin the moratorium.¹⁸² The district court agreed with the plaintiffs and issued a preliminary injunction on June 22, 2010.¹⁸³ On July 12, 2010, in response to the

Steps-In-Overhaul-of-Offshore-Energy-Oversight-and-Management.cfm?renderforprint=1&

180. *Id.*

181. Press Release, Dep’t of the Interior, Salazar Calls for New Safety Measures for Offshore Oil and Gas Operations; Orders Six Month Moratorium on Deepwater Drilling; Cancels Western Gulf and Virginia Lease Sales, Suspends Proposed Arctic Drilling para. 4 (May 27, 2010), *available at* <http://www.doi.gov/news/pressreleases/Salazar-Calls-for-New-Safety-Measures-for-Offshore-Oil-and-Gas-Operations-Orders-Six-Month-Moratorium-on-Deepwater-Drilling.cfm?renderforprint=1&> (last visited Feb. 18, 2011). *See also* Memorandum from Ken Salazar, Sec’y of the Interior, to Dir. of Minerals Mgmt. Serv. para. 2 (May 28, 2010) (finding that “offshore drilling of new deepwater wells poses an unacceptable threat of serious and irreparable harm to wildlife and the marine, coastal, and human environment” and “that the installation of additional safety or environmental protection equipment is necessary to prevent injury or loss of life and damage to property and the environment”), *available at* <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=33715>; Press Release, Dep’t of the Interior, Interior Issues Directive to Guide Safe, Six-Month Moratorium on Deepwater Drilling para. 3 (May 30, 2010) (specifying that, for purposes of the directive, “deepwater” drilling in water depths greater than five hundred feet), *available at* <http://www.doi.gov/news/pressreleases/Interior-Issues-Directive-to-Guide-Safe-Six-Month-Moratorium-on-Deepwater-Drilling.cfm?renderforprint=1&>.

182. *Hornbeck Offshore Servs., LLC v. Salazar*, 696 F. Supp. 2d 627, 630–32 (E.D. La. 2010).

183. *Id.* at 639.

district court's injunction, Secretary Salazar rescinded the original May 27 moratorium and issued a new, superseding moratorium scheduled to "last until November 30, 2010 or until such earlier time that the Secretary determines that deepwater drilling operations can proceed safely."¹⁸⁴

In the months following July 12, 2010 BOEM implemented new rules—described below in Section IV (B)(4)—designed to enhance the safety of OCS drilling operations. On October 12, 2010, Secretary Salazar announced that "the strengthened safety measures" that BOEM had implemented, "along with improved spill response and blowout containment capabilities, have reduced risks to a point where operators who play by the rules and clear the higher bar can be allowed to resume" deepwater drilling operations.¹⁸⁵ Pursuant to the Secretary's decision, the CEOs of companies seeking to drill deepwater wells must certify that their company is in compliance with all applicable rules, and operators must demonstrate that they have oil spill containment devices readily available for deployment.¹⁸⁶

On February 28, 2011, BOEM announced that it "approved the first deepwater drilling permit since the Deepwater Horizon explosion and resulting oil spill," noting that it approved the permit because "the operator successfully demonstrated that it [could] drill its deepwater well safely and that it [was] capable of containing a subsea blowout if it were

184. Press Release, Dep't of the Interior, Sec'y Salazar Issues New Suspensions to Guide Safe Pause on Deepwater Drilling: Bromwich to Engage Public, Industry and Stakeholders in Deepwater Drilling Safety Reforms para. 7 (July 12, 2010), *available at* <http://www.doi.gov/news/pressreleases/Secretary-Salazar-Issues-New-Suspensions-to-Guide-Safe-Pause-on-Deepwater-Drilling.cfm?renderforprint=1&>; *see also* Memorandum from Ken Salazar, Sec'y of the Interior to Michael R. Bromwich, Dir. of Bureau of Ocean Energy Mgmt., Regulation and Enforcement (July 12, 2010), *available at* <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=38375>. Secretary Salazar also appealed the district court's injunction of the original moratorium. Because Secretary Salazar rescinded and superseded the original May 27 moratorium, which was the subject of his appeal, a panel of the Court of Appeals for the Fifth Circuit dismissed the appeal as moot. *Hornbeck Offshore Servs., LLC v. Salazar*, No. 10-30585, 2010 WL 3825385, at *1 (5th Cir. Sept. 29, 2010).

185. Press Release, Dep't of the Interior, Salazar: Deepwater Drilling May Resume for Operators Who Clear Higher Bar for Safety, Environmental Protection para. 3 (Oct. 12, 2010), *available at* <http://www.doi.gov/news/pressreleases/Salazar-Deepwater-Drilling-May-Resume-for-Operators-Who-Clear-Higher-Bar-for-Safety-Environmental-Protection.cfm?renderforprint=1&>.

186. *Id.* para. 9.

to occur.”¹⁸⁷ Since that time, the agency has continued to approve deepwater drilling applications.¹⁸⁸

3. Limits on the Use of Categorical Exclusions

DOI also took steps to limit the use of categorical exclusions under NEPA when approving OCS oil and gas activities. On August 16, 2010—the same day that the Council on Environmental Quality released its report on BOEM’s implementation of NEPA—Secretary Salazar announced that DOI would “undertake[] a comprehensive review of its [NEPA] process and the use of categorical exclusions for exploration and drilling on the [OCS].”¹⁸⁹ In the interim, Secretary Salazar directed BOEM to “restrict its use of categorical exclusions for offshore oil and gas development to activities involving limited environmental risk”¹⁹⁰

Specifically, the Director of BOEM prohibited the agency from using certain categorical exclusions to satisfy NEPA review requirements for plans that require an application for a permit to drill and that involve the use of a subsea blowout preventer or a surface blowout preventer on a floating facility.¹⁹¹ Pursuant to the memorandum, BOEM will use an EA to analyze these types of projects.¹⁹² The Director of BOEM directed the agency to prepare categorical exclusion reviews (CER) for other types of OCS plans.¹⁹³ CERs assess whether the plan implicates any

187. Press Release, BOEMRE, BOEMRE Approves First Deepwater Drilling Permit to Meet Important New Safety Standards in Gulf of Mexico paras. 1-2 (Feb. 28, 2011).

188. *See, e.g.*, Press Release, BOEMRE, BOEMRE Approves Operations for Tenth Deepwater Well: Drilling Permit Meets Critical New Safety Standards para. 1 (Apr. 8, 2011) (announcing approval of tenth deepwater well since the *Deepwater Horizon* disaster).

189. Press Release, Dep’t of the Interior, Categorical Exclusions for Gulf Offshore Activity to be Limited while Interior Reviews NEPA Process and Develops Revised Policy para. 1 (Aug. 16, 2010), *available at* <http://www.doi.gov/news/pressreleases/Categorical-Exclusions-for-Gulf-Offshore-Activity-to-be-Limited-While-Interior-Reviews-NEPA-Process-and-Develops-Revised-Policy.cfm?renderforprint=1&>.

190. *Id.*

191. Memorandum from Michael R. Bromwich, Dir. of the Bureau of Ocean Energy Mgmt., Regulation, and Enforcement, to Walter Cruickshank, Deputy Dir. of the Bureau of Ocean Energy Mgmt., Regulation, and Enforcement, and Robert LaBelle, Acting Assoc. Dir. for Offshore Energy and Minerals Mgmt., 1 (Aug. 16, 2010), *available at* <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=42011>.

192. *Id.* at 2.

193. *Id.*

“extraordinary circumstances” that would require preparation of an EA.¹⁹⁴

As of this writing, DOI’s NEPA review is ongoing. When DOI completes its review process, it intends to “announce a new approach to NEPA compliance that takes into account the joint recommendations included in CEQ’s [August 16, 2010] report, statutory and/or regulatory constraints, and other appropriate factors.”¹⁹⁵

4. Strengthened Safety Requirements for OCS Lessees

DOI also took steps to strengthen safety requirements that governed OCS oil and gas operations. In June 2010, DOI issued a Notice to Lessees (NTL)¹⁹⁶ that required oil and gas lessees and operators who apply for new drilling permits or seek approval of exploration or development plans or development operations coordination documents “to submit information that addresses the possibility of a blowout and detail[] steps they are taking to prevent blowouts.”¹⁹⁷ Among other things, the NTL requires OCS operators to provide a well-specific blowout and worst-case discharge scenario, as well as the assumptions and calculations behind these scenarios.¹⁹⁸

In September 2010, DOI announced two new safety rules: the drilling safety rule and the workplace safety rule.¹⁹⁹ The drilling safety rule requires operators who apply for permits for drilling projects to meet

194. *Id.*

195. Press Release, Dep’t of the Interior, *supra* note 189, at 2.

196. NAT’L NOTICE TO LESSEES AND OPERATORS OF FED. OIL AND GAS LEASES, OUTER CONTINENTAL SHELF (OCS), DEP’T OF THE INTERIOR, MINERALS MGMT. SERV., NTL No. 2010-N06, INFORMATION REQUIREMENTS FOR EXPLORATION PLANS, DEVELOPMENT AND PRODUCTION PLANS, AND DEVELOPMENT OPERATIONS COORDINATION DOCUMENTS ON THE OCS (June 18, 2010), *available at* <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=35724>.

197. Press Release, Dep’t of the Interior, Interior Issues Directive Strengthening Blowout Prevention Requirements for Offshore Oil and Gas Operations (June 18, 2010), *available at* <http://www.doi.gov/news/pressreleases/Interior-Issues-Directive-Strengthening-Blowout-Prevention-Requirements-for-Offshore-Oil-and-Gas-Operations.cfm?renderforprint=1&>.

198. *Id.*; *see also* Nat’l Notice of Dep’t of Interior, Minerals Mgmt. Serv., *supra* note 196, at 2–3.

199. Press Release, Dep’t of the Interior, Salazar Announces Regulations to Strengthen Drilling Safety, Reduce Risk of Human Error on Offshore Oil and Gas Operations para. 1 (Sept. 30, 2010), *available at* <http://www.doi.gov/news/pressreleases/Salazar-Announces-Regulations-to-Strengthen-Drilling-Safety-Reduce-Risk-of-Human-Error-on-Offshore-Oil-and-Gas-Operations.cfm?renderforprint=1&>.

new standards for, and obtain independent third-party certification of, well casing and cementing; document blowout preventer inspections and maintenance; obtain independent verification of subsea well control equipment; and more.²⁰⁰ The workplace safety rule will “require operators to develop and implement Safety and Environmental Management Systems (SEMS).”²⁰¹ SEMS are “comprehensive safety and environmental impact program[s] designed to reduce human and organizational errors as the root cause of work-related accidents and offshore oil spills.”²⁰²

Later in the year, DOI issued another NTL: No. 2010-N10 (NTL 10).²⁰³ NTL 10 applies to operators using subsea blowout preventers or surface blowout preventers on floating facilities.²⁰⁴ It requires operators to submit, with each application for a well permit, a statement by an authorized company official that asserts that the operator will conduct its activities in compliance with all applicable regulations, including the new drilling safety rule.²⁰⁵ NTL 10 also confirms that BOEM will evaluate whether the operator has submitted information adequate to demonstrate “that it has access to and can deploy containment resources” adequate to respond promptly to “a blowout or other loss of well control.”²⁰⁶

In January 2011, DOI announced the creation of an Offshore Energy Safety Advisory Committee, designed “to provide advice on matters and actions relating to offshore energy safety, including, but not limited to drilling and workplace safety, well intervention and containment, and oil

200. See 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. 63,346, 63,351 (Oct. 14, 2010) (to be codified at 30 C.F.R. pt. 250).

201. Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Safety and Environmental Management Systems: Final Rule, 75 Fed. Reg. 63,610, 63,610 (Oct. 15, 2010) (to be codified at 30 C.F.R. pt. 250).

202. Press Release, Dep’t of the Interior, *supra* note 199, para. 8.

203. NAT’L NOTICE TO LESSEES AND OPERATORS OF FED. OIL AND GAS LEASES, OUTER CONTINENTAL SHELF (OCS), DEP’T OF THE INTERIOR, BUREAU OF OCEAN ENERGY MGMT., REGULATION AND ENFORCEMENT, NTL No. 2010-N10, STATEMENT OF COMPLIANCE WITH APPLICABLE REGULATIONS AND EVALUATION OF INFORMATION DEMONSTRATING ADEQUATE SPILL RESPONSE AND WELL CONTAINMENT RESOURCES (Nov. 8, 2010), *available at* <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=70560>.

204. *Id.* at 1.

205. *Id.*

206. *Id.*

spill response.”²⁰⁷ “The Committee will also facilitate collaborative research and development, training and execution in these and other areas relating to offshore energy safety.”²⁰⁸

C. Congressional Response to the Deepwater Horizon Disaster

Congress also took action in response to the *Deepwater Horizon* disaster. Both the House of Representatives and the Senate prepared legislative language designed to address flaws in the laws governing OCS oil and gas activities and oil spill liability and response. The primary legislative vehicle for OCS-related reform in the House of Representatives was H.R. 3534, the Consolidated Land, Energy, and Aquatic Resources Act of 2010 (CLEAR Act).²⁰⁹ Title I of the CLEAR Act would have abolished the MMS and replaced it with a series of three new agencies within DOI.²¹⁰ Provisions in Title II would have made important amendments to OCSLA.²¹¹ For example, it would have made changes to OCSLA’s policy statement;²¹² established new OCS leasing standards;²¹³ provided for mandatory funding to support protection, maintenance, and restoration of ocean and coastal ecosystems;²¹⁴ strengthened requirements for exploration plans and eliminated the thirty-day deadline for approval of such plans;²¹⁵ required additional consideration of environmental factors and consultation with the Secretary of Commerce when preparing five-year OCS oil and gas leasing programs;²¹⁶ and more. Title V of the CLEAR Act would have established restoration and scientific research and monitoring programs for the Gulf of Mexico;²¹⁷ Title VI would have enacted provisions designed to facilitate coordinated, multi-sector planning for OCS

207. Establishment of the Ocean Energy Safety Advisory Committee, 76 Fed. Reg. 4,128, 4,129 (Jan. 24, 2011).

208. *Id.*

209. Consolidated Land, Energy, and Aquatic Resources Act of 2010, H.R. 3534, 111th Cong. (2010).

210. *Id.* §§ 101–103, 106, 107.

211. *See generally id.* Title II, Subtitle A.

212. *Id.* § 203.

213. *Id.* § 205.

214. *Id.* § 207(d); *see also id.* § 605 (establishing Ocean Resources Conservation and Assistance Fund).

215. Consolidated Land, Energy, and Aquatic Resources Act of 2010, H.R. 3534, § 208, 111th Cong. (2010).

216. *See id.* § 209.

217. *Id.* §§ 501, 502.

activities;²¹⁸ and Title VII would have made significant changes to the existing laws governing oil spill liability and response.²¹⁹ The House of Representatives passed the CLEAR Act on July 30, 2010.²²⁰

In the Senate, the primary legislative response to the *Deepwater Horizon* disaster was S. 3663, the Clean Energy Jobs and Oil Spill Accountability Act of 2010.²²¹ Like the CLEAR Act, the Senate bill contained provisions that would have restructured DOI's administration of OCS activities,²²² amended OCSLA,²²³ changed laws governing oil spill liability and response,²²⁴ and established a long-term research and monitoring program for the Gulf of Mexico,²²⁵ among other things. Unlike the CLEAR Act, however, the Senate bill was not passed. As a result, as of this writing, Congress has not enacted any significant legislation to reform the governance of OCS oil and gas activities.

IV. THE WORK AHEAD: REMAINING SHORTCOMINGS IN THE OCS FRAMEWORK AND RECOMMENDED SOLUTIONS

The *Deepwater Horizon* disaster generated intense scrutiny of the planning and oversight of OCS oil and gas leasing and drilling. The scrutiny revealed that the administration of OCS oil and gas activities suffers from a range of serious shortcomings. For example: the OCS policy set forth in OCSLA fails to prioritize protection of the marine environment; OCSLA and its implementing regulations lack substantive, enforceable standards sufficient to ensure safety and protect marine ecosystems; environmental analysis of OCS activities is deficient; oil spill planning and preparedness is inadequate; and OCS oil and gas activities are not well integrated with other ocean uses. This Section describes these shortcomings in more detail, and recommends changes that would improve the policies and practices that govern OCS oil and gas activities.

218. *See id.* §§ 601–603.

219. *See generally id.* Title VII.

220. *See* 114 CONG. REC. D888 (daily ed. July 30, 2010).

221. Clean Energy Jobs and Oil Spill Accountability Act of 2010, S. 3663, 111th Cong. (2010).

222. *Id.* § 305.

223. *See, e.g., id.* §§ 304, 306.

224. *See, e.g., id.* §§ 102, 104.

225. *Id.* § 615.

A. Prioritizing the Protection of Marine Ecosystems in OCS Policy

The policy set forth in OCSLA states in part that the OCS should be made available for “expeditious and orderly development, subject to environmental safeguards.”²²⁶ This policy falls short because it fails to make protection of coastal and marine ecosystems the paramount policy objective.

Under the existing OCS policy, BOEM has focused on the extraction of oil and gas and has treated protection of the coastal and marine environment as a secondary consideration. For example, the National Commission that investigated the *Deepwater Horizon* disaster noted that staff at BOEM “have reported that [agency] leasing coordinators and managers discouraged them from reaching conclusions about potential environmental impacts that would increase the burden on lessees, ‘thus causing unnecessary delays for operators.’”²²⁷ The National Commission noted that several BOEM scientists reported that “their managers believed the result of NEPA evaluations should always be a ‘green light’ to proceed” with oil and gas activities.²²⁸ The National Commission also discovered that some managers within BOEM “reportedly ‘changed or minimized the [BOEM] scientists’ potential environmental impact findings in [NEPA] documents to expedite” the approval of plans for oil and gas activity.²²⁹ Similarly, a March 2010 Government Accountability Office study observed that BOEM “has . . . been vulnerable to allegations by stakeholders and former [BOEM] scientists of suppression or alteration of their work on environmental issues.”²³⁰ Further, a DOI Inspector General Report found that in one case, a manager at BOEM told a scientist who raised environmental concerns “to change his findings and, if he did not, ‘someone else would do it [for him].’”²³¹

Changing the overall OCS policy to one that prioritizes the protection of ocean ecosystems will not, on its own, prevent these kinds of abuses. However, changing the policy may contribute to a cultural shift at BOEM and may help foster a work environment in which BOEM managers no longer feel pressured to expedite OCS oil and gas projects

226. 43 U.S.C. § 1332(3) (2006).

227. NATIONAL COMMISSION, *supra* note 2, at 82.

228. *Id.*

229. *Id.* (second alteration in original).

230. GOV'T ACCOUNTABILITY OFFICE, OFFSHORE OIL AND GAS DEVELOPMENT: ADDITIONAL GUIDANCE WOULD HELP STRENGTHEN THE MINERALS MANAGEMENT SERVICE'S ASSESSMENT OF ENVIRONMENTAL IMPACTS IN THE NORTH ALEUTIAN BASIN 24 (2010), available at <http://www.gao.gov/new.items/d10276.pdf>.

231. OFFICE OF INSPECTOR GEN., *supra* note 160, at 34.

at the expense of the environment.²³² Changing the policy would also help ensure that governance of offshore oil and gas activities is consistent with the National Ocean Policy's call to "protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources."²³³

Congress should amend OCSLA's policy statement to state that protection, maintenance, and restoration of coastal and ocean ecosystems is the paramount OCS policy objective, and extraction of mineral resources should be permitted only when it will not compromise that objective. If Congress fails to amend OCSLA's policy statement, BOEM should use its authority under existing law to implement the policy in a manner that offers the greatest protection to ocean and coastal ecosystems.²³⁴ Either way, BOEM should use its discretion to ensure that it authorizes OCS oil and gas lease sales, exploratory drilling, and development and production only when science shows that such actions can proceed with minimal risk to the health of ocean and coastal ecosystems.

B. Creating Substantive, Enforceable Standards to Govern OCS Operations

In general, the statutory and regulatory provisions governing OCS oil and gas activities do not contain strong environmental standards. Although OCSLA requires BOEM to "balance" the potential benefits of oil and gas activities with risks to human, marine, and coastal environments,²³⁵ and to "consider" impacts to marine ecosystems,²³⁶

232. *Cf. id.* at 35 (recommending that BOEM explore and encourage internal policies "that promote a culture of balanced stewardship").

233. Exec. Order No. 13547, 75 Fed. Reg. 43,023, 43,023 (July 22, 2010). The National Ocean Policy also includes calls for "improv[ing] the resiliency of ocean, coastal, and Great Lakes ecosystems, communities, and economies," and "us[ing] the best available science and knowledge to inform decisions affecting the ocean, our coasts, and the Great Lakes." *Id.*

234. Pursuant to the executive order announcing the National Ocean Policy, BOEM must use its discretion to implement the National Ocean Policy's call to protect, maintain, and restore ocean and coastal ecosystems. *See id.* at 43,026 (requiring "[a]ll executive departments, agencies, and offices . . . whose actions affect the ocean, our coasts, and the Great Lakes" to implement the National Ocean Policy and associated principles and objectives "to the fullest extent consistent with applicable law").

235. *See, e.g.*, 43 U.S.C. § 1344(a)(3) (2006) (requiring the Secretary of the Interior to "select the timing and location of leasing . . . so as to obtain a proper *balance* between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone" (emphasis added)).

these requirements are not substantive, enforceable standards. Consequently, they do not ensure a minimum level of protection for the marine environment, species, or habitats. Absent rigorous environmental standards, BOEM has the discretion to assign great weight to the benefits of oil and gas development and relatively little weight to the environmental risks of such development. Similarly, absent substantive, enforceable standards, there is no guarantee that BOEM's "consideration" of environmental impacts will lead to meaningful in-the-water protections.

Meaningful standards are necessary to ensure that OCS decision-makers not only "balance" and "consider" the health of marine ecosystems, but also take concrete steps to protect those ecosystems from potential threats. For example, a new standard should be implemented to ensure that federal regulators have adequate baseline scientific information before they make decisions about leasing, exploration, or development. Another standard should be added to require federal regulators to identify and provide for the protection of important ecological areas before OCS areas are opened to oil and gas leasing. Still another should require operators to demonstrate the ability to respond effectively to an oil spill in real-world conditions before those operators conduct site-specific oil and gas activities, and to use the highest possible safety and technology practices. Congress could add such substantive standards to OCSLA through an amendment, or BOEM could use its discretion to implement environmental protection standards through the promulgation of new regulations or policies.

1. Creating a Standard for Baseline Science

Baseline scientific information can be used to inform decisions about whether, when, and where to allow OCS oil and gas activities. In addition, baseline science is necessary in the natural resource damage assessment process following an oil spill because the impacts of the spill must be measured against the environmental baseline that existed prior to

236. See, e.g., *id.* § 1344(a)(1) ("Management of the outer Continental Shelf shall be conducted in a manner which *considers* economic, social, and environmental values . . . and the potential impact of oil and gas exploration on other resource values . . . and the marine, coastal, and human environments." (emphasis added)); see also *id.* § 1344(a)(2) (requiring the Secretary of the Interior to determine the timing and location of oil and gas activities "based on a *consideration* of" a variety of factors including, but not limited to "the relative environmental sensitivity and marine productivity of different areas" of the OCS (emphasis added)).

the spill.²³⁷ To ensure that decision-makers have adequate baseline science about OCS areas that may be subject to oil and gas activities, Congress or BOEM should implement standards that require the availability of specific types and quantities of baseline scientific information. This information might include information on physical characteristics—such as data on the benthic environment, ocean currents, wind and weather patterns, and water temperature and salinity—as well as information about the ecosystem, such as the presence, distribution, and abundance of species and the web of relationships among those species. Pursuant to these proposed baseline science standards, BOEM would not be authorized to make an area of the OCS available for leasing until the required type and quantity of baseline data is available for that area.²³⁸

2. Ensuring Protection of Important Ecological Areas

Important ecological areas include, but are not limited to, important ocean habitats, areas of high productivity, migratory pathways, and areas important for subsistence purposes.²³⁹ Under the current OCS framework, BOEM is under no obligation to take steps to identify and protect important ecological areas from the effects of industrial development, such as oil and gas activity. Instead, in the vast regions of the OCS open to leasing, the oil and gas industry has enormous control over the location of development. Oil and gas companies have no obligation to heed underlying ecological values, and they can choose lease sites from the millions or tens of millions of acres that BOEM

237. See, e.g., 15 C.F.R. § 990.52 (2010) (noting that natural resource trustees “must quantify the degree, and spatial and temporal extent of such injuries relative to baseline”); see also *id.* § 990.30 (defining “baseline” as “the condition of the natural resources and services that would have existed had the [oil spill] incident not occurred”).

238. The need for baseline science information is particularly acute in the Arctic OCS. See, e.g., NATIONAL COMMISSION, *supra* note 2, at 303 (“[S]cientific research on the ecosystems of the Arctic is difficult and expensive. Good information exists for only a few species, and even for those, just for certain times of the year or in certain areas.”). “As a result, the Commission recommend[ed] an immediate, comprehensive federal research effort to provide a foundation of scientific information on the Arctic (with periodic review by the National Academy of Sciences), and annual stock assessments for marine mammals, fish, and birds that use the Beaufort and Chukchi Seas.” *Id.*

239. See MELANIE A. SMITH, ARCTIC MARINE SYNTHESIS: ATLAS OF THE CHUKCHI AND BEAUFORT SEAS 1-8 (2010) (defining important ecological areas as “areas in the ocean that disproportionately contribute to the health and biodiversity of the ocean ecosystem and therefore mandate special considerations and appropriate protections during coastal and marine spatial planning as well as in other management decisions”).

makes available.²⁴⁰ To promote healthy and resilient ocean ecosystems, important ecological areas must be identified and protected before BOEM allows industrial activities to proceed.²⁴¹ To achieve this objective, Congress should amend OCSLA—or BOEM should amend its regulations or policies—to add a standard that requires federal regulators to gather information for the different regions of the OCS and identify important ecological areas within those regions. The proposed standard should ensure that regulatory agencies preserve the vitality of important ecological areas by requiring operators to meet specific and stringent precautions before they conduct on-water activities.

3. Raising the Bar on Oil Spill Response

As noted above, OCS operators must prepare oil spill response plans for their OCS facilities. These documents must contain “a plan for responding, to the maximum extent practicable, to a worst case discharge,”²⁴² and must “identify, and ensure . . . the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge.”²⁴³ However, neither the statutory language nor the implementing regulations require OCS operators to demonstrate that their spill response plan will work.²⁴⁴

For example, estimates following the *Deepwater Horizon* disaster reveal that despite the massive effort that BP activated to clean up the oil spill,²⁴⁵ response efforts were able to remove or chemically disperse only about one-third of the oil that was discharged from the Macondo well.²⁴⁶ The National Commission determined that “[t]he technology available

240. See *supra* note 44 and accompanying text.

241. The National Commission recommended that, “[i]n less well-explored areas, [BOEM] should reduce the size of lease sales so their geographic scope allows for a meaningful analysis of potential environmental impacts and identification of areas of ecological significance.” NATIONAL COMMISSION, *supra* note 2, at 262 (emphasis added).

242. 33 U.S.C. § 1321(j)(5)(A)(i) (2006).

243. *Id.* § 1321(j)(5)(D)(iii).

244. NATIONAL COMMISSION, *supra* note 2, at 132-133 (describing glaring errors in plan).

245. *Id.* at 133 (showing that, at its peak, more than 45,000 people were involved in the response effort).

246. See LUBCHENCO ET AL., *supra* note 4, Figure I (estimating that of the 4.9 million barrels of oil that was discharged, responders recovered 17 percent directly from the wellhead, skimmed 3 percent, burned 5 percent, and chemically dispersed 8 percent, for a total of 33 percent).

for cleaning up oil spills has improved only incrementally since 1990,” that “[f]ederal research and development programs in this area are underfunded,” and that the major oil companies have committed minimal resources to in-house research and development related to spill response technology.²⁴⁷

To spur better on-water cleanup results—and more investment in research and development for response technologies—Congress or BOEM should implement stringent oil spill response standards. Regulators should require operators to demonstrate the ability to meet specific performance standards in real-world conditions in the lease area before allowing operators to conduct drilling operations. The performance standards should require operators to demonstrate, in simulated field trials, that they have in place adequate equipment, trained personnel, and resources to respond effectively in the event of a catastrophic spill. Operators should be required to show that they can deploy their resources in real-world conditions, and that the chosen equipment is effective in meeting an established oil removal performance target. These spill response standards should be enforced through independent third-party review of facility response plans and regular audits during the period of exploration and production.

4. Promoting Safety and Technology on the OCS

OCS oil and gas operations should also be subject to tougher safety and technology standards. A DOI Inspector General Report concluded that BOEM’s “process for developing or updating standards and regulations has not kept pace with new and emerging offshore technologies.”²⁴⁸ Congress or BOEM should require operators of all new offshore leases to demonstrate that they are using the most effective safety technology for exploration or development activity as a precondition to drilling.²⁴⁹ Standards regarding spill prevention technologies should be implemented, as well. These might require redundant engineering controls such as multiple blowout prevention

247. NATIONAL COMMISSION, *supra* note 2, at 269.

248. OFFICE OF INSPECTOR GEN., *supra* note 160, at 44.

249. At present, OCSLA calls for “the use of the best available and safest technologies[,]” and this mandate applies “on all new drilling and production operations and, wherever practicable, on existing operations.” 43 U.S.C. § 1347(b) (2006). However, this provision is weakened significantly by certain caveats: it applies only to certain types of equipment, and the Secretary of the Interior may waive the requirement if he determines that the additional cost of using the “best” or “safest” technology outweighs the additional benefits of using the technology. *Id.*

systems, on-site blowout containment structures, and double-walled pipes or tanks. All OCS leases should be required to incorporate the most environmentally protective timing and location stipulations, along with other terms designed to reduce the potential for environmental damage and adverse impacts on the coastal zone.

C. Improving Environmental Analysis of OCS Oil and Gas Activities

BOEM's current approach to OCS planning and evaluation of proposed oil and gas activities fails to ensure rigorous analysis of potential impacts and risks. Congress or BOEM—working with other administrative agencies—should institute multiple changes to improve the process. For example, federal agencies other than BOEM should have a greater role in planning and conducting environmental analyses for OCS oil and gas activities. To make environmental review more meaningful, five-year OCS oil and gas leasing programs and individual OCS lease sales should focus on smaller, more targeted areas of the OCS; multi-million acre “area-wide” lease sales should be eliminated. NEPA analysis of offshore oil and gas activities must be improved to ensure that federal decision-makers conduct thorough analysis at all phases of the OCSLA process. To facilitate environmental analysis at the exploration plan stage, Congress should eliminate the provision of OCSLA that requires approval of an exploration plan within thirty days of submission.²⁵⁰

1. Engaging Expert Agencies Beyond BOEM

Under the current framework, expert federal agencies other than BOEM have limited ability to shape BOEM's analysis of the impacts of oil and gas leasing programs, OCS lease sales, and other offshore oil and gas activities.²⁵¹ NOAA, for example, has broad oceans expertise²⁵² and should be an equal partner with BOEM in initial decisions about whether, when, and where to permit oil and gas activities on the OCS. Greater involvement by NOAA will help ensure that environmental analyses for OCS planning and leasing decisions include a proper range

250. See 43 U.S.C. § 1340(c)(1).

251. See NATIONAL COMMISSION, *supra* note 2, at 262 (noting that while BOEM must “consider” comments from other expert agencies, it is not obligated to respond to those comments or give them any particular weight).

252. See *id.* (describing NOAA as “the nation’s ocean agency with the most expertise in marine science and the management of living marine resources”).

of reasonable alternatives and assess accurately the environmental risks associated with oil and gas activities.

Congress should amend OCSLA to give these other agencies a greater role in environmental analysis and decision making regarding OCS oil and gas activities. For example, the National Commission recommended that Congress amend OCSLA “to provide NOAA with a formal consultative role during the development of the five-year lease plan and lease sale stages.”²⁵³

In the absence of congressional action, BOEM should use its existing discretion to reach out to other federal agencies to initiate a more formal interagency consultation process for decisions relating to the planning and carrying out of OCS oil and gas activities. The National Commission recommended that “NOAA and other federal agencies with appropriate expertise should be encouraged to act as cooperating agencies in NEPA reviews of offshore energy production activities, including exploration and development plans and drilling permit applications.”²⁵⁴ It also recommended that “[f]ederal agencies that submit comments to [BOEM] as part of a NEPA process should receive a written response indicating how the information was applied and if it was not included, why it was not included.”²⁵⁵

BOEM has already taken a step toward greater cooperation with NOAA: on December 1, 2010, the BOEM Director, Michael R. Bromwich, announced that he was “in the process of completing an agreement with the [NOAA] through which NOAA will collaborate with [BOEM] in the environmental analyses for OCS planning.”²⁵⁶ BOEM should consider similar agreements with other expert agencies, including the EPA and the U.S. Fish and Wildlife Service.²⁵⁷ In addition, when reviewing spill response plans for OCS facilities, BOEM should seek to partner with the Coast Guard—the expert agency tasked with overseeing spill response for offshore facilities.²⁵⁸

Finally, at every phase of the OCSLA process, BOEM and other federal agencies should solicit, consider, and incorporate local and

253. *Id.* at 264.

254. *Id.* at 265.

255. *Id.*

256. Press Release, Bureau of Ocean Energy Mgmt., Salazar Announces Revised OCS Leasing Program: Key Modifications Based on Ongoing Reforms, Unparalleled Safety and Environmental Standards, and Rigorous Scientific Review para. 6 (Dec. 1, 2010), available at <http://www.doi.gov/news/pressreleases/Salazar-Announces-Revised-OCS-Leasing-Program.cfm>.

257. See, e.g., NATIONAL COMMISSION, *supra* note 2, at 262.

258. See *supra* Part II(B)(2) of this Article.

traditional knowledge from affected communities into the decision-making process. This would ensure that expert concerns are heard from the outset, and may help avoid later complications. Affected states and local governments must also be partners in the preparation of NEPA analyses.

2. Narrowing the Geographic Scope of OCS Lease Sales

As noted above, recent five-year oil and gas leasing programs and individual lease sales have included planning areas that are millions or tens of millions of acres in size.²⁵⁹ An environmental analysis of potential impacts on an area that is millions or tens of millions of acres in size cannot account adequately for the variability that exists across the planning area, nor can it anticipate adequately site-specific impacts. The National Commission observed that “OCS lease sales cover such large geographic areas that meaningful NEPA review is difficult.”²⁶⁰ It recommended that planning areas included in OCS lease sales should be restricted to smaller geographic areas to promote more meaningful environmental analysis.²⁶¹

3. Using “Tiering” Appropriately

As discussed above, the OCSLA process is segmented into four distinct stages; these stages step down from a broad, national-level plan to a regional lease sale to a site-specific action, such as an exploration plan or development and production plan.²⁶² It has also been noted above that NEPA regulations encourage federal agencies to “tier” environmental analyses to avoid duplication and focus on critical issues.²⁶³ The Court of Appeals for the District of Columbia observed that BOEM “may issue a broader EIS at the earlier ‘need and site selection’ stage of a program, and issue subsequent, more detailed

259. See *supra* note 44 and accompanying text.

260. See NATIONAL COMMISSION, *supra* note 2, at 261.

261. See *id.* (noting the expansive area of several recent OCS lease sales and observing that “it is appropriate to conduct environmental reviews on a finer geographic scale before private-sector commitments of this magnitude are made to purchase leases.”); *cf. id.* at 262 (recommending that BOEM reduce the size of lease sales “in less well explored areas,” so that the “geographic scope [of the lease sale] allows for a meaningful analysis of potential environmental impacts and identification of areas of ecological significance”).

262. See *supra* Part II(A)(1) – (4) of this Article.

263. 40 C.F.R. § 1502.20 (2010); see also *id.* § 1508.28 (defining “tiering”).

environmental impact statements at the program's later, more site-specific stage."²⁶⁴ BOEM, however, has improperly exploited the segmented nature of the OCSLA process to avoid thorough NEPA analysis. The National Commission determined that BOEM's brand of tiering "created a system where deeper environmental analysis at more geographically targeted and advanced planning stages did not always take place."²⁶⁵ Similarly, the Council on Environmental Quality observed that BOEM's use of tiering "was not transparent . . . and has led to confusion and concern about whether environmental impacts were sufficiently evaluated and disclosed."²⁶⁶

In the Arctic, for example, BOEM prepared a nationwide, programmatic EIS for the original 2007 to 2012 OCS oil and gas leasing program.²⁶⁷ At the second stage of OCSLA, in support of Chukchi Sea Lease Sale 193, the agency prepared another broad EIS that purported to analyze potential environmental impacts for an area of about 34 million acres.²⁶⁸ At the third stage, when BOEM evaluated the potential environmental impacts of proposed exploration plans on leases sold in Lease Sale 193, the agency did not follow the path laid out by the Court of Appeals for the District of Columbia. Instead of preparing a "more detailed environmental impact statement[]" at this "later, more site-specific stage," BOEM prepared less detailed EAs.²⁶⁹ In so doing, BOEM deprived itself and the public of a more rigorous environmental analysis, and deprived the public of the opportunity for meaningful comment.

Going forward, BOEM must reform its implementation of NEPA to ensure that it analyzes adequately site-specific OCS oil and gas activities. The Council on Environmental Quality recommends that the agency "reexamine its NEPA implementation policies to ensure that its use of tiering is both clear and well-defined, and is not being used to limit site-specific environmental analysis."²⁷⁰ The National Commission recommends that BOEM develop a NEPA handbook that addresses the issue of tiering, and "provide[s] guidelines for applying NEPA in a

264. *Ctr. for Biological Diversity v. Dep't of the Interior*, 563 F.3d 466, 474 (D.C. Cir. 2009) (citing 40 C.F.R. § 1508.28).

265. NATIONAL COMMISSION, *supra* note 2, at 260.

266. COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 3.

267. *See generally* 2007–2012 FIVE-YEAR PROGRAM FEIS, *supra* note 144.

268. *See generally* LEASE SALE 193 FEIS, *supra* note 144, at I-2.

269. *See, e.g.*, 2009 BEAUFORT EA *supra* note 145; 2009 CHUKCHI EA, *supra* note 145.

270. COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 23.

consistent, transparent, and appropriate manner to decisions affecting OCS oil and gas activities.”²⁷¹

4. Eliminating the Use of Categorical Exclusions for OCS Drilling Activities

Under NEPA regulations, categorical exclusions are appropriate only for those actions that “do not individually or cumulatively have a significant effect on the human environment.”²⁷² BOEM, however, created categorical exclusions for actions that can and do have significant effects on the environment.

For example, BOEM created a categorical exclusion for the “[a]pproval of an offshore lease or unit exploration[,] development/production plan[,] or a Development Operation Coordination Document in the central or western Gulf of Mexico.”²⁷³ The categorical exclusion was inapplicable to plans or documents that presented particularly high risks, such as facilities in areas that posed a “high seismic risk” or that used “new or unusual technology.”²⁷⁴ Nonetheless, BOEM used the categorical exclusion to justify its decision to approve—without preparing an EA or EIS—BP’s plan to use an oil rig floating in nearly 5,000 feet of water to drill an exploration well that would penetrate roughly two-and-a-half miles below the seabed.²⁷⁵

The impacts associated with even normal drilling operations include noise, air, and water pollution, as well as increased vessel and air traffic.²⁷⁶ When BP lost control of the Macondo well and the *Deepwater Horizon* burst into flames on April 20, 2010, it demonstrated graphically something that should have been obvious all along: all OCS drilling activities carry with them the potential for a catastrophic oil spill. Given

271. NATIONAL COMMISSION, *supra* note 2, at 261.

272. 40 C.F.R. § 1508.4 (2010).

273. BUREAU OF OCEAN ENERGY MGMT., DEP’T OF INTERIOR, DEPARTMENTAL MANUAL § 15.4(C)(10) (2004), *available at* http://elips.doi.gov/app_dm/act_getfiles.cfm?relnum=3625.

274. *Id.*

275. COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 19–20; *see also* NATIONAL COMMISSION, *supra* note 2, at 3 (noting water depth and depth of the formation targeted by the Macondo well).

276. *See, e.g.*, 2009 CHUKCHI EA, *supra* note 145, at 29 (discussing noise generated by drilling equipment from proposed exploratory drilling); *id.* at 27 (discussing air emissions from proposed exploratory drilling); *id.* at 26 (noting that discharges from proposed exploration drilling would include “cement slurry, drainage waters, and domestic wastewaters”); *id.* at 22–25 (discussing air and vessel traffic associated with proposed exploratory drilling).

the actual and potential impacts of OCS drilling operations, it is unreasonable to assume—as BOEM did—that such operations do not have a significant effect on the human environment. As a result, OCS drilling operations are not eligible to be categorically excluded from environmental review under NEPA.²⁷⁷ BOEM should revise its Department Manual to eliminate categorical exclusions for OCS drilling activities. In the future, all OCS drilling activities should be subject to some level of site-specific NEPA analysis, either an EA or EIS.

5. Ensuring Appropriate Analysis of Low-Probability, High-Risk Events

The BP *Deepwater Horizon* disaster highlighted the risk of failing to engage in worst-case oil spill planning. When making decisions that involve the potential for catastrophic result—such as a major oil spill—BOEM’s environmental analyses must take seriously the potential for disaster; this is true even if the probability of such a disaster is low.²⁷⁸

BOEM failed to analyze this type of low-probability, high-risk event when it prepared EAs for proposed exploration activities in the Beaufort and Chukchi seas. BOEM’s EAs stated that “[a] very large spill from a well-control incident is not a reasonably foreseeable event in connection with the OCS exploration activities set forth in Shell’s 2010 exploration plan, and therefore, this EA does not analyze the impacts of such a worst-case scenario.”²⁷⁹ Instead of analyzing a potential blowout scenario, the EA for Shell’s exploration plan for the Chukchi Sea dismissed the possibility of a major spill and reviewed instead the effects of a small, 48-barrel fuel transfer spill.²⁸⁰

In the future, BOEM must analyze low-probability, high-risk events to ensure that it is prepared for a worst-case disaster. The Council on Environmental Quality concludes that, in light of the *Deepwater Horizon* disaster, BOEM must “take steps to incorporate catastrophic risk analysis.”²⁸¹ Likewise, the National Commission recommends that BOEM “incorporate the ‘worst-case scenario’ calculations from industry

277. See 40 C.F.R. § 1508.4 (2010).

278. See, e.g., *id.* § 1502.22(b)(4) (noting that in a NEPA analysis when information is missing or unavailable, “reasonably foreseeable” impacts include “impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason”).

279. 2009 BEAUFORT EA, *supra* note 145, at A-2; 2009 CHUKCHI EA, *supra* note 145, at A-2.

280. 2009 CHUKCHI EA, *supra* note 145, at 31-32.

281. COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 27.

oil spill response plans into NEPA documents and other environmental analyses or reviews” to inform the agency’s “estimates for potential oil spill situations in its environmental analyses.”²⁸²

6. Eliminating the Thirty-Day Deadline for Approval of Exploration Plans

OCSLA requires BOEM to approve an exploration plan within thirty days of the date the exploration plan is submitted.²⁸³ The thirty-day requirement does not preclude BOEM from conducting a thorough environmental analysis, which might include the preparation of an EIS. BOEMRE could, for example, complete the NEPA analysis before it deems an exploration plan submitted. Indeed, the National Commission recommends that BOEM not consider exploration plans “officially ‘submitted’ until all of the required content, necessary environmental reviews, and other analyses are complete and adequate to provide a sound basis for decision-making.”²⁸⁴

Nonetheless, OCSLA’s thirty-day requirement may tempt BOEM to rush its environmental analyses, or skip them altogether through the use of categorical exclusions. Attempting to perform a NEPA analysis for an exploration plan in thirty days would likely result in an inadequate analysis and would certainly provide little opportunity for public review and comment. As the National Commission suggests, “[i]f environmental review is to occur after plan submission, [the thirty-day] timetable effectively precludes the kind of exacting review necessary to ensure that [NEPA’s] environmental safeguards can be achieved.”²⁸⁵ Congress should eliminate the thirty-day deadline under which BOEM must approve a “submitted” exploration plan to facilitate more rigorous NEPA analysis.²⁸⁶

D. Improving Agency Review of Oil Spill Response Plans and Promoting Better Oil Spill Cleanup Technology

BOEM’s review of facility oil spill response plans fails to ensure that owners and operators will be able to respond effectively in the event of

282. NATIONAL COMMISSION, *supra* note 2, at 267.

283. *See* 43 U.S.C. § 1340(c)(1) (2006).

284. NATIONAL COMMISSION, *supra* note 2, at 262.

285. *Id.* at 80.

286. *Cf. id.* at 262 (recommending that Congress change OCSLA’s existing thirty-day deadline to a sixty-day deadline).

major oil spills. In addition, current laws, regulations, and policies have failed to promote advances in oil spill cleanup technologies.

1. Improving Agency Review of Oil Spill Response Plans

Oil spill response plans must be subject to more stringent review and analysis. Existing law tasks BOEM with reviewing oil spill response plans for OCS facilities, but evidence suggests that the agency has not taken this responsibility seriously.²⁸⁷

For example, BOEM apparently did not question the oil spill response plan that covered BP's Macondo well in the Gulf of Mexico, even though that spill plan "identified three different worst-case scenarios that ranged from 28,033 to 250,000 barrels of oil discharge and used identical language to 'analyze' the shoreline impacts under each scenario."²⁸⁸ The same spill plan also referenced walruses, sea lions, and sea otters—species that do not occur in the Gulf of Mexico.²⁸⁹ In the Arctic, BOEM approved an oil spill response plan in which Shell Offshore, Inc. claimed that it would recover 90 percent of the oil spilled during a worst case discharge from its proposed facility in the Beaufort Sea²⁹⁰—even though a 90 percent recovery rate is unquestionably unrealistic. In earlier Arctic planning documents, BOEM acknowledged that "[o]n average, spill-response efforts result in recovery of approximately 10-20 % of the oil released to the ocean environment."²⁹¹ And as noted earlier, despite the massive spill response effort that followed the *Deepwater Horizon* blowout, only one-third of the oil that was discharged from the Macondo well was recovered or treated with

287. See, e.g., NATIONAL COMMISSION, *supra* note 2, at 84 (concluding that BOEM did not "evidence[] serious attention to detail" when it approved the spill plan that was applicable to BP's Macondo well, and noting that at least four other oil spill response plans for OCS facilities in the Gulf of Mexico contained the same error).

288. *Id.* at 84.

289. BP, REGIONAL OIL SPILL RESPONSE PLAN – GULF OF MEXICO § 11 fig. 11-3 (2009); see also NATIONAL COMMISSION, *supra* note 2, at 84 (noting that the spill plan "described biological resources nonexistent in the Gulf [of Mexico]").

290. See SHELL OFFSHORE INC., BEAUFORT SEA REGIONAL EXPLORATION OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN 1-29 (2010), available at http://alaska.boemre.gov/fo/ODPCPs/2010_Beaufort_cplan.pdf.

(assuming that only 10 percent of the discharge from a hypothetical blowout will "escape[] primary offshore recovery efforts"); *id.* at unmarked page following I-12 (containing BOEM approval letter).

291. MINERALS MGMT. SERV., FINAL ENVIRONMENTAL IMPACT STATEMENT, BEAUFORT SEA PLANNING AREA OIL AND GAS LEASE SALES 186, 195, AND 202, IV-17 (2003), available at http://alaska.boemre.gov/ref/EIA_EA/2003_001.pdf.

dispersants.²⁹² This kind of uncritical review led DOI's Office of Inspector General to conclude that BOEM's review of oil spill response plans "does not ensure that critical data are correct."²⁹³

To facilitate more serious review of oil spill response plans for offshore facilities, broaden the scope of review, and promote better information sharing among federal agencies involved in spill response efforts—including the Coast Guard, NOAA, and EPA—Congress should require multiple federal agencies to review and approve these plans. In the absence of Congressional action, DOI should work with other agencies to establish formal mechanisms for interagency review of oil spill response plans.²⁹⁴ The National Commission endorsed the idea of interagency spill plan review:

In addition to the Department of the Interior, other agencies with relevant scientific and operational expertise should play a role in evaluating spill response plans to verify that operators can conduct the response and containment operations detailed in their plans. Specifically, oil spill response plans, including source-control measures, should be subject to interagency review and approval by the Coast Guard, EPA, and NOAA. Other parts of the federal government, such as Department of Energy national laboratories that possess relevant scientific expertise, could be consulted.²⁹⁵

The National Commission also noted that interagency review of oil spill response plans for OCS facilities would facilitate greater integration of those plans with broader-level area contingency plans and regional contingency plans because it would "involv[e] the agencies with primary responsibility for government spill response planning in oversight of industry planning."²⁹⁶

In addition to interagency review of oil spill response plans for OCS facilities, BOEM should allow for public comment on such plans: "Plans should also be made available for a public comment period prior to final

292. LUBCHENCO ET AL., *supra* note 4, at 2.

293. OFFICE OF INSPECTOR GEN., *supra* note 160, at 44.

294. For example, the DOI Inspector General Report recommended that DOI "[d]raft a new Memorandum of Agreement with the Coast Guard, EPA, and other interested agencies, requiring appropriate participation of all parties in the review of [oil spill response plans] and any related drills or exercises." *Id.* at 49. Such an approach would not require Congressional action.

295. NATIONAL COMMISSION, *supra* note 2, at 266-67.

296. *Id.* at 267.

approval and response plans should be made available to the public following their approval.”²⁹⁷

2. Promoting Advances in Oil Spill Response Technologies

Current technologies for removing spilled oil are much the same today as they were over twenty years ago, at the time of the *Exxon Valdez* oil spill. This is not particularly surprising. As the National Commission pointed out, “neither industry nor government has made significant investments in improving the menu of response options or significantly improved their effectiveness.”²⁹⁸

To ensure that research and development of oil spill response technologies is not put off until the next catastrophic spill, Congress should provide steady funding for federal agencies to promote and conduct such research. The National Commission recommended that Congress establish a funding mechanism that is not subject to the annual appropriations process to “increase federal funding for oil spill response research by agencies such as [DOI], the Coast Guard, EPA, and NOAA—including NOAA’s Office of Response and Restoration.”²⁹⁹ In addition, agencies may be able to increase their own focus on spill response research. For example, the DOI Inspector General recommended that DOI “[c]onduct additional research on containment and control measures to determine appropriate requirements for containing oil discharge at the source.”³⁰⁰ As noted above, agencies can also promote industry investment in oil spill response research and development by instituting strict new performance standards that require operators of OCS facilities to demonstrate the effectiveness of their spill response equipment in real-world conditions before they are allowed to conduct drilling activities.³⁰¹

E. The Need For Multi-Sector Planning: Integrating OCS Oil and Gas Activities with Other Ocean Uses

OCSLA is a single-sector statute that focuses almost exclusively on oil and gas activities. Unsurprisingly, BOEM’s implementation of OCSLA has shared that narrow focus. Under the existing framework,

297. *Id.*

298. *Id.* at 269.

299. *Id.* at 270.

300. OFFICE OF THE INSPECTOR GEN., *supra* note 160, at 51.

301. *See supra* Part IV(B)(3).

BOEM has viewed the ocean through an oil-and-gas lens. Its decisions about offshore oil and gas activities—which may affect broad areas of the ocean and impact other sectors of the economy³⁰²—have not been integrated with decisions about other ocean uses. The result has been fragmented and inefficient management, and a failure to prioritize the health of ocean and coastal ecosystems. In the future, federal decisions about OCS oil and gas activities should be incorporated into a comprehensive framework that promotes integrated planning and management. In addition, Congress should establish a permanently appropriated, dedicated funding source for ocean and coastal conservation and management.

1. Multi-Sector Planning

In July 2010, President Obama established the National Ocean Council, an interagency body charged with providing direction to federal agencies to ensure that those agencies implement the National Ocean Policy and related objectives.³⁰³ The Council will also organize regional coastal and marine spatial planning processes designed to foster “a more integrated, comprehensive, ecosystem-based, flexible, and proactive approach to planning and managing sustainable multiple uses across sectors and improve the conservation of the ocean, our coasts, and the Great Lakes.”³⁰⁴

The Secretary of the Interior, as a member of the National Ocean Council,³⁰⁵ should ensure that BOEM and other relevant agencies within DOI are active participants in National Ocean Council processes. Other federal agencies involved in the planning and management of OCS oil and gas activities should participate fully, as well. Participation in interagency National Ocean Council processes will facilitate improved communication and coordination among different agencies with respect to decisions about oil and gas activities.

302. For example, the *Deepwater Horizon* disaster led NOAA to institute fishery closures that, at their maximum, prohibited commercial fishing of more than one-third of the Gulf of Mexico’s exclusive economic zone. See NOAA FISHERIES SERV., SOUTHEAST REGIONAL OFFICE, DEEPWATER HORIZON/BP OIL SPILL: SIZE AND PERCENT COVERAGE OF FISHING AREA CLOSURES DUE TO BP OIL SPILL, <http://sero.nmfs.noaa.gov/ClosureSizeandPercentCoverage.htm> (last updated Jan. 31, 2011).

303. See Exec. Order No. 13,547, 75 Fed. Reg. 43,023, 43,025 (July 22, 2010).

304. *Id.* at 43,023.

305. *Id.* at 43,024.

The involvement of BOEM and other federal agencies in regional coastal and marine spatial planning processes—required by Executive Order 13,547³⁰⁶—could be especially valuable. Coastal and marine spatial planning will involve the assembly and synthesis of scientific data, which will promote better understanding of marine and coastal ecosystems and facilitate science-based management.³⁰⁷ The coastal and marine spatial planning process will also help identify in advance potential conflicts among different sectors or stakeholders, helping to promote smarter, better-coordinated use of the ocean.³⁰⁸ The National Commission concluded that “[i]ntegrating five-year [OCS] leasing plans and associated leasing decisions with the coastal and marine spatial planning process will be an important step toward assuring the sustainable use of ocean and coastal ecosystems.”³⁰⁹

2. Funding for Ocean Conservation and Management

Ocean and coastal ecosystems are already under stress from overexploitation, habitat degradation, coastal and marine pollution, climate change, and ocean acidification. In the Gulf of Mexico, the *Deepwater Horizon* disaster was another blow to an already-degraded ocean environment.³¹⁰ To address the significant threats to the health of these ecosystems, Congress should establish a permanently appropriated, dedicated funding source for ocean, coastal, and Great Lakes conservation and management. Given the risks posed by OCS oil and gas activities, a portion of the revenue generated from those activities should be directed to a fund to support ocean protection, maintenance,

306. *Id.* at 43,026.

307. See COUNCIL ON ENVTL. QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE 66 (2010), available at http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf (noting that scientific knowledge and data are essential to coastal and marine spatial planning); *id.* at 68-69 (explaining that the coastal and marine spatial planning process would develop “science-based decision-support tools, including models, assessments, and visualization capabilities,” to facilitate marine and coastal planning and “synthesize information most relevant” to decision-makers.).

308. See *id.* at 48 (noting that one principle of coastal and marine spatial planning is to manage multiple existing and emerging uses “in a manner that reduces conflict, enhances compatibility among uses and with sustained ecosystem functions and services, provides for public access, and increases certainty and predictability for economic investments.”).

309. NATIONAL COMMISSION, *supra* note 2, at 263.

310. See Exec. Order No. 13,554, 75 Fed. Reg. 62,313, 62,313 (Oct. 8, 2010) (observing that the Gulf of Mexico ecosystem had suffered a “longstanding ecological decline” even before the *Deepwater Horizon* disaster).

and restoration—including research and monitoring, such as ocean observing systems. Specifically, Congress should create a trust fund capitalized annually at a minimum of ten percent of revenues derived from offshore oil and gas energy development. The fund should be used to finance activities and projects that satisfy criteria designed to ensure that they benefit protection, maintenance, and restoration of marine ecosystem health.

V. NEW FRONTIERS: PROTECTING ARCTIC MARINE ECOSYSTEMS FROM AN EXPANSION OF OCS OIL AND GAS ACTIVITIES

Although the Gulf of Mexico region has produced the vast majority of OCS oil and gas to date,³¹¹ the Beaufort and Chukchi seas off the coast of Alaska's North Slope may be the next frontier in OCS oil and gas exploration, due to "the likelihood of finding significant new sources of oil" in the region.³¹² The reforms described above will improve governance of OCS oil and gas activities no matter where they take place. However, OCS operations in remote Arctic waters pose increased challenges and risks that require special consideration. As the National Commission noted, "[i]n the near term, the Alaskan frontier is likely to attract the greatest attention, and to require the closest scrutiny, given the potential energy resources and the physical and environmental challenges of pursuing them safely."³¹³

This Part briefly describes the Arctic environment, the people and wildlife that call it home, and the risks and challenges associated with conducting OCS oil and gas operations in that environment. It also advocates a suite of measures necessary to promote informed decision-making and safer operations in the Arctic.

A. Arctic Environment, People, and Wildlife

The Arctic OCS is a severe environment. Temperatures are below freezing for most of the year, and winter temperatures at Prudhoe Bay on

311. See, e.g., MINERALS MGMT. SERV., REPORT TO CONGRESS: COMPREHENSIVE INVENTORY OF U.S. OCS OIL AND NATURAL GAS RESOURCES, ENERGY POLICY ACT OF 2005—SECTION 357, vii (2006), available at <http://www.boemre.gov/revaldiv/PDFs/FinalInventoryReportDeliveredToCongress-corrected3-6-06.pdf> (showing a cumulative production of oil from the Gulf of Mexico OCS of 13.05 billion barrels of oil, while cumulative production from the rest of the OCS combined was less than 1.1 billion barrels of oil).

312. NATIONAL COMMISSION, *supra* note 2, at 301.

313. *Id.*

the Beaufort Sea have plunged below -60 °F.³¹⁴ Although the Beaufort and Chukchi seas do not receive a great deal of precipitation, they are subject to fog, rain, and snowstorms that can limit visibility.³¹⁵ From June to August, fog is common, and there are low visibility conditions on the open sea 25-50 percent of the time.³¹⁶ The Beaufort and Chukchi seas are also subject to fierce storms, some of which can last for two weeks at a time.³¹⁷ Some storms have produced sustained winds of seventy-five miles per hour and reported wind gusts close to 100 miles per hour.³¹⁸ Unlike other areas of the OCS, the Beaufort and Chukchi seas are characterized by seasonal sea ice. Sea ice usually reaches its maximum extent in March, and melts back to its minimum extent in September.³¹⁹ Sea ice is a dynamic environment; pack ice shifts and moves with winds and currents and varies in time and place.³²⁰

The Arctic environment has been home to human communities for thousands of years.³²¹ Many Arctic residents depend on healthy marine ecosystems to support their subsistence way of life.³²² Some coastal villages hunt limited numbers of bowhead whales in the Beaufort or Chukchi seas, and the whale hunt is central to their culture.³²³ Arctic peoples may also depend on fish, walrus, seals, and/or seabirds to support their subsistence way of life.³²⁴ For many people who live in the villages along the Beaufort and Chukchi coasts, continued health of marine ecosystems is tied directly to the continued health of their food supply and culture.³²⁵

314. MINERALS MGMT. SERV., 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT BEAUFORT SEA AND CHUKCHI SEA PLANNING AREAS OIL AND GAS LEASE SALES 209, 212, 217, AND 221, 3-13 (2008), *available at* http://alaska.boemre.gov/ref/EIS%20EA/ArcticMultiSale_209/2008_0055_deis/vol1.pdf.

315. *Id.*

316. *Id.*

317. *Id.* at 3-14.

318. *Id.*

319. *Id.* at 3-31.

320. *Id.*

321. NAT'L MARINE FISHERIES SERV., SECRETARIAL REVIEW DRAFT ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS FOR THE ARCTIC FISHERY MANAGEMENT PLAN AND AMENDMENT 29 TO THE FISHERY MANAGEMENT PLAN FOR BERING SEA/ALEUTIAN ISLANDS KING AND TANNER CRABS 202 (2009), *available at* http://www.fakr.noaa.gov/analyses/arctic/earirirfa0409_secdraft.pdf.

322. *Id.* at 226-27.

323. *Id.*

324. *Id.* at 226.

325. *Id.*

In addition to the humans who call the Arctic home, the Beaufort and Chukchi seas support some of the world's most iconic wildlife species. These waters are home to an array of marine mammals including bowhead, gray, and beluga whales; Pacific walrus; spotted, bearded, ribbon, and ringed seals; and polar bears.³²⁶ The Arctic also hosts migratory wildlife such as gray, humpback, minke, and killer whales, and millions of seabirds, shorebirds, and waterfowl; these species come in the summer to breed, feed, and rear their young.³²⁷ The Arctic supports a number of important lower trophic level species, as well. Arctic cod, for example, are a particularly important part of the Arctic marine food web.³²⁸

B. Challenges to OCS Oil and Gas Activity in the Arctic

Environmental conditions present challenges for oil and gas companies that seek to operate in the Beaufort and Chukchi seas. Working conditions in the region are affected by “extreme cold, extended seasons of darkness, hurricane-strength storms, and pervasive fog.”³²⁹ In addition, “[t]he Chukchi and Beaufort Seas are covered by varying forms of ice for eight to nine months a year,” which “limit[s] exploratory drilling and many other activities to the summer months.”³³⁰

The physical conditions of the Arctic also pose challenges for oil spill response operations. For example, “serious questions remain about how to access spilled oil when the [sea] is iced over or in seasonal slushy conditions.”³³¹ Mechanical recovery equipment—such as vessels using skimmers and boom—would likely operate at much lower efficiencies in the icy waters of the Arctic than in more temperate waters.³³² In-situ burning may be difficult in slush or “grease” ice conditions, or in certain concentrations of ice.³³³ “[T]he general consensus in the spill response

326. *Id.* at 162–175.

327. *Id.* at 142–50; 164–67.

328. *See id.* at 85 (noting that research indicates “that Arctic cod is a crucial link between the sea ice food web and arctic marine mammals and birds”); *see also id.* at 201 (“Arctic cod is considered a keystone species in the Arctic ecosystem.”).

329. NATIONAL COMMISSION, *supra* note 2, at 302.

330. *Id.*

331. *Id.*

332. PEW ENVTL. GROUP, OIL SPILL PREVENTION AND RESPONSE IN THE U.S. ARCTIC OCEAN: UNEXAMINED RISKS, UNACCEPTABLE CONSEQUENCES 75 (2010), *available at* http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/PEW-1010_ARCTIC_Report.pdf.

333. *Id.* at 79–80.

community is that dispersants are not a proven technology for use in most sea ice conditions.”³³⁴ Because oil will be slower to weather in cold Arctic temperatures, it likely “would linger much longer in the marine environment.”³³⁵

Lack of infrastructure to support a large spill response is another factor in the Arctic. The eight main communities of Alaska’s North Slope are not connected by road; there are relatively few docks and airstrips; the nearest major port is in Dutch Harbor, Alaska, about 1,300 nautical miles from Point Barrow; and the nearest Coast Guard air station is approximately 950 miles away in Kodiak, Alaska.³³⁶ The National Commission noted that “industry and support infrastructures are least developed, or absent” in the Arctic OCS.³³⁷

Another limitation on OCS oil and gas operations in the Arctic is a lack of baseline scientific information necessary to make informed planning and management decisions for the region. Such information is especially critical because the Arctic’s physical and ecological systems are in flux due to climate change.³³⁸ The National Commission observed that “scientific research on the ecosystems of the Arctic is difficult and expensive. Good information exists for only a few species, and even for those, just for certain times of the year or in certain areas.”³³⁹ It also determined that “detailed geological and environmental information does not exist for the Arctic exploration areas” in the same way that it does for the Gulf of Mexico or even the Atlantic.³⁴⁰ For example, a recent BOEM analysis cataloged all the statements in an EIS prepared for an oil and gas lease sale in the Chukchi Sea “that acknowledged incomplete or unavailable information.”³⁴¹ The catalog of

334. *Id.* at 82.

335. NATIONAL COMMISSION, *supra* note 2, at 302.

336. PEW ENVTL. GROUP, *supra* note 332, at 22–23.

337. NATIONAL COMMISSION, *supra* note 2, at 301; *see also id.* at 302 (noting that “oil-spill response efforts are complicated year-round by the remote location” of the Arctic OCS).

338. *See* NAT’L OCEANIC AND ATMOSPHERIC ADMIN., NOAA’S ARCTIC VISION & STRATEGY 1 (2010), *available at* http://www.arctic.noaa.gov/docs/arctic_strat_2010.pdf. (noting that “[t]here is now widespread and dramatic evidence of overall change in the Arctic region,” including changes to the atmosphere, sea ice, and ocean); *id.* at 9 (identifying the need for “[i]mproved baseline observations and understanding of Arctic climate and ecosystems” to “reduce[] uncertainty in assessing and predicting impacts”).

339. NATIONAL COMMISSION, *supra* note 2, at 303.

340. *Id.* at 301.

341. BUREAU OF OCEAN ENERGY MGMT., REGULATION, AND ENFORCEMENT, DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, CHUKCHI SEA PLANNING AREA OIL AND GAS LEASE SALE 193, App. A, 1 (2010) [hereinafter DRAFT SEIS LEASE SALE 193],

missing information was 140 pages long.³⁴² Recognizing the need for additional scientific information about the Arctic OCS, Secretary Salazar directed the U.S. Geological Survey to conduct “a special review of information that is known” and to summarize “what knowledge gaps may exist regarding environmental sensitivities, including impending climate change, and other factors that would be considered in decisions about potential future development” in the Arctic OCS.³⁴³

C. Additional Measures Needed to Safeguard Arctic Ecosystems

Although the Arctic OCS will benefit from the general OCS reforms described in Part IV of this Article, additional measures are needed to ensure that Arctic drilling—if it is allowed to proceed—is conducted with “utmost care.”³⁴⁴

First, decision-makers must have access to more comprehensive scientific information about the Beaufort and Chukchi seas. The U.S. Geological Survey study noted above will be a good first step toward identifying knowledge gaps. However, because of the limited nature of the U.S. Geological Survey study, a more comprehensive scientific gap analysis, performed by an independent entity outside DOI, may be necessary.³⁴⁵ Beyond that, a long-term scientific research and monitoring program is needed to begin the process of filling knowledge gaps. The

available at http://alaska.boemre.gov/ref/EIS%20EA/2010_034.pdf. BOEM undertook this analysis because the U.S. District Court for the District of Alaska determined that the underlying EIS was unlawful because, among other things, the EIS failed to evaluate properly whether missing information was essential to the decision-making process. *Native Vill. of Point Hope v. Salazar*, 730 F. Supp. 2d 1009, 1019 (D. Alaska 2010).

342. *See generally* DRAFT SEIS LEASE SALE 193, *supra* note 341, App. A.

343. Press Release, Dep’t of the Interior, Sec’y Salazar Unveils Arctic Studies Initiative that will Inform Oil and Gas Decisions for Beaufort and Chukchi Seas, paras. 3-4 (Apr. 13, 2010), *available at* http://www.doi.gov/news/pressreleases/2010_04_13_releaseAcfm?renderforprint=1&.

344. *See* NATIONAL COMMISSION, *supra* note 2, at 302 (observing that conducting OCS oil and gas operations in “offshore Arctic Alaska requires the utmost care, given the special challenges and risks associated with this frontier”).

345. For example, the conference report for the Department of the Interior, Environment, and Related Agencies Appropriations Act, 2010 noted the need for “continuing comprehensive assessment of the health, biodiversity, and functioning of Arctic marine and coastal ecosystems, including the impacts of industrial activities and of climate change,” and called for a “scientific analysis conducted by an independent entity to assess existing scientific information and identify any relevant additional information to ensure adequate environmental review of proposed industrial activities in the region.” H.R. REP. NO. 111-316, at 98–99 (2009) (Conf. Rep.).

National Commission, for example, “recommend[ed] an immediate, comprehensive federal research effort to provide a foundation of scientific information on the Arctic.”³⁴⁶ According to the Commission, such an effort should produce results

capable of informing decision-making related to oil and gas leasing, exploration, and development and production in the Arctic; measuring and monitoring impacts of oil and gas development on Arctic ecological resources; natural resource damage assessment should an oil spill occur[;] and protocols in any treaty negotiated among the Arctic nations.³⁴⁷

Second, the federal government must develop oil spill response measures that are specific to the Arctic environment. As noted above in Parts IV(B)(3) and IV(D), government regulators should introduce substantive, enforceable performance standards for oil spill response, promote interagency review of oil spill response plans, and support the development of better cleanup technologies. In doing so, regulators must address the unique environmental conditions of the Arctic OCS. Congress or BOEM should implement Arctic-specific spill-response standards to ensure that spill response technologies will work effectively in icy waters, and that there is adequate infrastructure and Coast Guard presence in the Beaufort and Chukchi seas to support response efforts in the event of a catastrophic spill. For example, the National Commission recommended that before BOEM makes a determination that drilling in a particular area of the Arctic is appropriate, (1) the agency should ensure that industry containment and response plans are adequate; (2) the Coast Guard and oil companies in the region should coordinate carefully and build and deploy the necessary capabilities; and (3) Congress should fund an expansion of Coast Guard capabilities in the Arctic.³⁴⁸

Third, management of activities on the Arctic OCS must be better coordinated and must place a greater emphasis on protecting the health of Arctic marine ecosystems. One of the National Ocean Council’s (NOC) national priority objectives is addressing “environmental stewardship needs in the Arctic Ocean and adjacent coastal areas in the face of climate-induced and other environmental changes.”³⁴⁹ To help attain this objective, the NOC is in the process of preparing a strategic

346. NATIONAL COMMISSION, *supra* note 2, at 303.

347. *Id.*

348. NATIONAL COMMISSION, *supra* note 2, at 304.

349. COUNCIL ON ENVTL. QUALITY, *supra* note 307, at 6.

action plan for the Arctic.³⁵⁰ In drafting the Arctic strategic action plan, the NOC should prioritize protection of Arctic marine ecosystems and emphasize science-based decision-making; it should take a precautionary approach toward oil and gas activities in Arctic waters. As members of the NOC,³⁵¹ DOI, NOAA, the Coast Guard, EPA, and other federal agencies should work together to ensure that the strategic action plan addresses issues related to potential impacts of oil and gas activities in the Arctic, including the potential for oil spills in the Beaufort and Chukchi seas. When coastal and marine spatial planning efforts get underway in the Arctic, these agencies should engage proactively.³⁵²

Fourth, BOEM should prepare updated, comprehensive NEPA analyses and oil spill response plans for proposed oil and gas activities in the Arctic. It is not appropriate to rely on NEPA analyses prepared prior to the *Deepwater Horizon* disaster. As the CEQ observed:

[t]he BP Oil Spill constitutes significant new information and circumstances that may require reevaluation of some conclusions reached in prior NEPA reviews and other environmental analyses and studies. Specifically, conclusions may change about the likelihood, magnitude, and environmental impacts of a major spill in connection with OCS oil and gas drilling activities.³⁵³

As a result, before deciding whether to authorize exploration drilling in the Beaufort or Chukchi seas, BOEM must require potential OCS operators to submit new exploration plans. To evaluate the potential impacts of those exploration plans, BOEM should prepare comprehensive EISs, based on the latest information, including information revealed by investigations of the *Deepwater Horizon* disaster, the U.S. Geological Survey's review of Arctic science, and other sources.

350. *Id.* at 39–40; *see also* National Ocean Council; Development of Strategic Action Plans for the National Policy for the Stewardship of the Ocean, Our Coasts, and the Great Lakes, 76 Fed. Reg. 4,139, 4,140 (Jan. 24, 2011) (calling for public comments on nine strategic action plans, including a strategic action plan to address changing conditions in the Arctic).

351. COUNCIL ON ENVTL QUALITY, *supra* note 307, at 20.

352. *See, e.g.*, NATIONAL COMMISSION, *supra* note 2, at 263 (“Integrating five-year leasing plans and associated leasing decisions with the coastal and marine spatial planning process will be an important step toward assuring the sustainable use of ocean and coastal ecosystems. It could also reduce uncertainty for industry and provide greater predictability for potential users of different areas.”).

353. COUNCIL ON ENVTL. QUALITY, *supra* note 125, at 32.

Although implementing them will take some time, the foregoing measures will help decision-makers make informed choices about whether to allow oil and gas operations in the Beaufort or Chukchi seas. If oil and gas activities do proceed, these measures will reduce the risk of a catastrophic oil spill in vulnerable Arctic waters.

VI. CONCLUSION

The *Deepwater Horizon* blowout was a tragedy that took the lives of eleven people and led to a marine oil spill of unprecedented size. The disaster caused acute and ongoing injury to the people, wildlife, and economy of the Gulf of Mexico, and rightly triggered a reassessment of the nation's oversight of OCS oil and gas activities. A series of investigations and studies—some still in progress—researched what went wrong and why it went wrong, and developed recommendations for improvement. The 111th Congress developed comprehensive legislation designed to address shortcomings in the laws that govern offshore oil and gas activities, but in the end, failed to pass that legislation. DOI has taken many steps to reform its internal structure and improve safety and oversight, but as the National Commission observed, “[t]o assure human safety and environmental protection, regulatory oversight of leasing, energy exploration, and production require reforms even beyond those significant reforms already initiated since the *Deepwater Horizon* disaster.”³⁵⁴

Meaningful reform will require an OCS policy that prioritizes the protection of ecosystem health; substantive, enforceable standards designed to achieve that protection; improved coordination among agencies; and better processes for evaluating potential environmental risks and spill response capabilities. It will also require a willingness to look beyond the oil and gas sector, and to implement practices that facilitate integrated, coordinated, multi-sector planning and management processes designed to help ensure protection, maintenance, and restoration of ocean and coastal ecosystems.

354. GRAHAM & REILLY, *supra* note 1, at vii.