

Throwing Precaution to the Wind: NEPA and the Deepwater Horizon Blowout*

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I. Introduction

On April 20, 2010, British Petroleum's ("BP") Deepwater Horizon oil platform exploded, killing eleven workers.¹ When the platform sank to the bottom of the Gulf of Mexico two days later, oil erupted out of the riser—a 5000-foot pipe connecting the platform to the well on the ocean floor.² Efforts to stem the flow failed when a safety device, the "blowout preventer," could not be activated.³ Finally, after a number of attempts to stop the leak, BP capped the well on July 15.⁴ Nearly five million barrels of oil were released over the course of eighty-six days, making the Deepwater Horizon the largest offshore oil spill in world history.⁵

This Perspective Piece uncovers some of the regulatory failures that led to the disaster, focusing on the National

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1. *Times Topics: Gulf of Mexico Oil Spill (2010)*, N.Y. TIMES (Jan. 11, 2011), http://topics.nytimes.com/top/reference/timestopics/subjects/o/oil_spills/gulf_of_mexico_2010/index.html; Henry Fountain, *U.S. Says BP Well is Finally 'Dead'*, N.Y. TIMES, Sept. 19, 2010, at A14.
2. Campbell Robertson & Leslie Kaufman, *Oil Leaks Could Take Months to Stop*, N.Y. TIMES, Apr. 25, 2010, at A11.
3. *Times Topics: Gulf of Mexico Oil Spill*, *supra* note 1.
4. Justin Gills & Campbell Robertson, *On the Surface, Gulf Oil Spill is Vanishing Fast; Concerns Stay*, N.Y. TIMES, July 27, 2010, at A1.
5. *Times Topics: Gulf of Mexico Oil Spill*, *supra* note 1.

Environmental Policy Act of 1969 ("NEPA"),⁶ and describing how the government's failure to take NEPA seriously reveals significant flaws in the oil and gas program as a whole. We analyze the deficiencies of the NEPA process and suggest areas for reform, including restricting the use of tiering and the availability of categorical exclusions, and requiring preparation of worst-case scenarios and more thorough consideration of indirect and cumulative effects of offshore oil and gas leasing.⁷

II. NEPA and the Precautionary Principle

NEPA was the first environmental statute of the modern era, and it remains a cornerstone of federal environmental law.⁸ NEPA requires federal agencies to engage in a careful analysis of proposed projects *before* any actions or subsequent effects take place.⁹ It is the quintessential "look before you leap" requirement, and an elemental expression of the precautionary principle in U.S. law.¹⁰ NEPA is designed to achieve two principal goals: to force agencies to factor environmental considerations into their decisionmaking processes, particularly if those agencies would otherwise be inclined to ignore

6. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4347 (2006).

7. We leave the analysis of additional areas warranting regulatory overhaul to other scholars. For suggestions on other necessary reforms *see* Flournoy et al., *supra* note *, at 4–5.

8. *See, e.g.,* Daniel R. Mandelker, *The National Environmental Policy Act: A Review of Its Experiences and Problems*, 32 WASH. U. J. L. & POL'Y 293 (2010); David R. Hodas, *The Role of Law in Defining Sustainable Development: NEPA Reconsidered*, 3 WIDENER L. SYMP. J. 1, 34 (1998).

9. 42 U.S.C. § 4332(2)(C) (2006).

10. The precautionary principle provides that "[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3–14, 1992, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/5/Rev.1, princ. 15 (Aug. 12, 1992). *See generally* Noah Sachs, *Rescuing the Strong Precautionary Principle from its Critics: The Case of Chemical Regulation*, ILL. L. REV. (forthcoming 2011), available at http://www.richmond.edu/_common_/files/faculty-staff-bio/law/publications/Rescuing_the_SPP-formatted_August.pdf; David Dana, *A Behavioral Economic Defense of the Precautionary Principle*, 97 NW. U. L. REV. 1315 (2003).

the potential adverse impacts of their actions; and to disclose their findings to Congress and the public.¹¹

NEPA mandates that for every “major Federal action[] significantly affecting the quality of the human environment,” the federal agency proponent prepare a detailed public statement, known as an Environmental Impact Statement (“EIS”).¹² The EIS must include:

- Information on the environmental impact of the proposed action, available alternatives, and any adverse effects that could not be avoided if the action were implemented;¹³ and
- Disclosure of “any irreversible and irretrievable commitments of resources” if the action were implemented.¹⁴

NEPA also established the Council on Environmental Quality (“CEQ”) and authorized it “to gather timely and authoritative information concerning the conditions and trends in the quality of the environment both current and prospective, [and] to analyze and interpret such information for the purpose of determining whether such conditions and trends are interfering, or are likely to interfere” with the achievement of NEPA’s environmentally protective policies.¹⁵ CEQ was later given the authority to develop regulations on NEPA compliance.¹⁶ In 1978, CEQ finalized a set of binding regulations that apply to all federal agencies.¹⁷ The regulations direct each federal agency to prepare its own specific NEPA procedures consistent with that agency’s particular mission.¹⁸ The agencies are required to identify and establish criteria for three types of actions: (1) actions that are categorically excluded from environmental review; (2) actions that call for the preparation of an Environmental Assessment (“EA”), which is a concise analysis used to determine whether a full EIS is warranted; and (3) actions that require preparation of an EIS.¹⁹ EAs are followed by either an EIS or a “Finding of No Significant Impact” that explains why the action will not have a significant effect on the environment.²⁰

III. The Role of NEPA in Deepwater Drilling

Offshore drilling activities, such as the ones involved in the Deepwater Horizon spill, are regulated under the Outer Continental Shelf Lands Act (“OCSLA”), which establishes a four-stage oil and gas development process.²¹ The program

includes: (1) preparation of a nationwide five-year development plan; (2) specific lease sales consistent with the five-year plan, identifying which areas are open to development and at what pace; (3) exploration plans; and (4) development and production plans.²² Each of these steps qualifies as a separate agency action that is subject to NEPA.²³ At each step, the analysis becomes both increasingly detailed and focused, honing in on the specific activities and areas at issue.

At the time the activities related to the Deepwater Horizon were going through these steps, the U.S. Department of the Interior’s Minerals Management Service (“MMS”) was in charge of ensuring that NEPA was properly applied to offshore drilling activities.²⁴ In April 2007, MMS released a programmatic EIS that purported to analyze the potential region-wide impacts associated with the 2007-2012 Outer Continental Shelf Oil and Gas Leasing Program.²⁵ Also in April 2007, MMS released a final EIS (the Multi-Sale EIS) for eleven lease sales in the Gulf of Mexico Central and Western Planning Areas, which covered ninety-five million acres, including the Deepwater Horizon site.²⁶ A few months later, in October 2007, MMS issued an EA for Lease Sale 206 within the Central Planning Area.²⁷ A Finding of No Significant Impact accompanied the EA and concluded that MMS had no new or different impacts to consider because MMS had already addressed any potentially significant impacts associated with Lease Sale 206 in the Multi-Sale EIS.²⁸ Finally, in April 2009, MMS approved BP’s drilling plan for the Deepwater Horizon project without any environmental review whatsoever.²⁹ MMS’s decision to categorically exclude the plan from NEPA review implicitly reflects the agency’s conclusion that activities authorized under the plan would have neither individual nor cumulative effects on the envi-

11. 42 U.S.C. § 4332(2)(C) (2006); *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 768 (2004).
12. 42 U.S.C. § 4332(2)(C) (2006).
13. *Id.* § 4332(2)(C)(i)–(iii).
14. *Id.* § 4332(2)(C)(v).
15. *Id.* §§ 4342, 4344(2).
16. Exec. Order No. 11991, 42 Fed. Reg. 26,967 (May 24, 1977).
17. Implementation of Procedural Provisions, 43 Fed. Reg. 55978 (Nov. 29, 1978) (codified at 40 C.F.R. §§ 1500–1508).
18. 40 C.F.R. § 1500.6 (2010).
19. *Id.* § 1501.4.
20. *Id.* §§ 1501.4, 1508.13.
21. 43 U.S.C. §§ 1334–1351 (2006).

22. *See Sec’y of the Interior v. California*, 464 U.S. 312, 337 (1984) (describing the four stages for developing an offshore well).
23. *See id.* (noting that each stage requires “separate regulatory review”).
24. *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 (2010), available at <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ocs-nepa.pdf> [hereinafter CEQ Report].
25. MINERALS MGMT. SERV., U.S. DEP’T OF THE INTERIOR, PROPOSED FINAL PROGRAM: OUTER CONTINENTAL SHELF LEASING PROGRAM (2007), available at www.boemre.gov/5-year/PDFs/MMSProposedFinalProgram2007-2012.pdf.
26. MINERALS MGMT. SERV., U.S. DEP’T OF THE INTERIOR, GULF OF MEXICO OSC OIL AND GAS LEASE SALES: 2007–2012, FINAL ENVIRONMENTAL IMPACT STATEMENT (2007), available at <http://www.gomr.boemre.gov/PDFs/2007/2007-018-Vol1.pdf> [hereinafter FINAL EIS].
27. MINERALS MGMT. SERV., U.S. DEP’T OF THE INTERIOR, PROPOSED GULF OF MEXICO OCS OIL AND GAS LEASE SALE 206, CENTRAL PLANNING AREA, ENVIRONMENTAL ASSESSMENT (2007), available at <http://www.gomr.boemre.gov/PDFs/2007/2007-059.pdf>.
28. *Id.* at 23–24.
29. *See* NAT’L COMM’N ON THE BP DEEPWATER HORIZON OIL SPILL & OFFSHORE DRILLING, REPORT TO THE PRESIDENT, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING 82 (2011) [hereinafter DEEP WATER: THE GULF OIL DISASTER]; Jeffrey Jones & Jeff Mason, *RPT-BP’s US Gulf Project Exempted from Enviro Analysis*, REUTERS, May 6, 2010, <http://www.reuters.com/article/2010/05/06/oil-rig-leak-exemption-idUSN0621334420100506?type=marketsNews>.

ronment.³⁰ MMS's implementation of NEPA fell far short of the statutory goals and requirements by failing to consider and plan for the worst-case scenario, and by improperly relying on categorical exclusions and tiered analysis of potential environmental effects. Each regulatory failure, and how it contributed to the Deepwater Horizon disaster, is described in detail below, along with proposals for reform.

IV. Regulatory Failures and Proposed NEPA Reforms

A. Failure to Consider the Worst-Case Scenario

Catastrophes happen. Consider the eruption of toxic gases from the Union Carbide plant in Bhopal, India, the explosion and radioactive fallout at the Chernobyl nuclear power plant in Ukraine, and the 2011 Japan tsunami and nuclear crisis.³¹ For Americans, examples closer to home include the core meltdown at the Three Mile Island nuclear reactor, the toxic wastes oozing into the playgrounds and homes of Love Canal, and the levee failures in the wake of Hurricane Katrina.³² Even closer to the topic at hand are the 1989 wreck of the Exxon Valdez, which resulted in plumes of oil that fouled the waters and coasts of Prince William Sound, and the 1969 blowout at Union Oil's Santa Barbara rig that poured oil into the Pacific and along the California coast, the latter of which helped motivate the passage of NEPA.³³ The likelihood of these events happening may have seemed infinitesimally small before the fact, but happen they did. And the magnitude of resulting harm, particularly on vulnerable human and ecological communities, was enormous.³⁴

Catastrophes count. The public's perception of risk and willingness to accept risky activities turns on the understanding of hazard characteristics, including the potential for disaster, the irreversibility of potential impacts, the threats to future generations, the voluntariness of exposure, and the overall costs and benefits of the activity in question.³⁵ In each of the events listed above, the identification, disclosure, and assessment of potential disasters in advance might have caused the public to oppose—and decisionmakers account-

able to the public to reject—the proposed action, or at least insist that both people and the environment were protected to the greatest extent possible.

To promote full disclosure of environmental risks by project proponents and meaningful scrutiny by decisionmakers and the public, the 1978 NEPA regulations issued by CEQ required federal agencies to include a worst-case analysis (“WCA”) of potential catastrophes, along with a discussion of the probability of occurrence, in their EISs.³⁶ WCA was not required for every proposed action, but only when information regarding potential consequences was unknown. The regulation provided:

If (1) the information relevant to adverse impacts is essential to a reasoned choice among alternatives and is not known and the overall costs of obtaining it are exorbitant or (2) the information relevant to adverse impacts is important to the decision and the means to obtain it are not known (e.g., the means for obtaining it are beyond the state of the art) the agency shall weigh the need for the action against the risk and severity of possible adverse impacts were the action to proceed in the face of uncertainty. If the agency proceeds, it shall include a worst case analysis and an indication of the probability or improbability of its occurrence.³⁷

According to CEQ's guidance on NEPA implementation, the WCA “should also include a spectrum of events of higher probability but less drastic impact.”³⁸ CEQ explained that “one of the federal government's most important obligations is to present to the fullest extent possible the spectrum of consequences that may result from agency decisions, and the details of their potential consequences for the human environment.”³⁹

By forcing the agency to consider the risk and severity of possible, yet uncertain, catastrophic effects, the 1978 regulation provided the decisionmaker with the necessary tools to evaluate and balance the need for the action against the risks of moving forward.⁴⁰ Rather than jumping blindly into the unknown, industries and agencies alike had to face the uncertainties related to their proposals, reveal those uncertainties to the public, and consider scenarios involving low probability but high-impact events that might occur during the life of a project. Armed with this knowledge, the public could assess the merits of the project and provide meaningful input to the decisionmaker.

Despite the importance of worst-case scenario analysis, CEQ rescinded the WCA requirement in 1986 and replaced it with a new, watered-down regulation.⁴¹ CEQ defended this

30. DEP'T OF THE INTERIOR, DEPARTMENTAL MANUAL, 516 DM 15.4(C)(10), (14) (2004) [hereinafter DOI MANUAL].

31. See, e.g., Jonathan Dressner, *Deepwater Horizon, Chernobyl, Bhopal*, HIST. NEWS NETWORK (June 7, 2010), <http://hnn.us/articles/127605.html>; *The Latest of Japan's Earthquake, Tsunami and Nuclear Crisis*, ASSOCIATED PRESS (Mar. 30, 2011, 1:15 PM), http://www.washingtonpost.com/world/the-latest-on-japans-earthquake-tsunami-and-nuclear-crisis/2011/03/30/AF4eyZ3B_story.html.

32. See *id.*; Eric R. Pogue, *The Catastrophe Model of Risk Regulation and the Regulatory Legacy of Three Mile Island and Love Canal*, 15 PENN ST. ENVTL. L. REV. 463 (2007). For additional information on the Love Canal disaster see Eckardt C. Beck, *The Love Canal Tragedy*, U.S. ENVTL. PROT. AGENCY (Jan. 1979), <http://www.epa.gov/history/topics/lovecanal/01.htm>. For Three Mile Island, see NUCLEAR REGULATORY COMM'N, THREE MILE ISLAND ACCIDENT, available at <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/3mile-isle.pdf>.

33. See Bradley C. Karkkainen, *Getting to "Let's Talk": Legal and Natural Destabilizations and the Future of Regional Collaboration*, 8 NEV. L.J. 811, 819 (2008) (linking the Santa Barbara oil spill and the enactment of NEPA); Dressner, *supra* note 31.

34. See Dressner, *supra* note 31; Beck, *supra* note 32; NUCLEAR REGULATORY COMM'N, *supra* note 32.

35. Paul Slovic, *Perception of Risk*, 236 SCI. 280, 283–85 (1987).

36. 43 Fed. Reg. 55,984 (1978) (codified at 40 C.F.R. § 1502.22 (1978)).

37. *Id.*

38. Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026, 18,032 (Mar. 23, 1981).

39. *Id.*

40. See *Sierra Club v. Sigler*, 695 F.2d 957, 973–75, 984 (5th Cir.1983) (upholding the 1978 WCA regulation as applied to permits for a deepwater port and oil distribution system, and requiring the Corps to prepare a WCA for a massive spill in the Gulf); *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1245–46 (9th Cir. 1984) (invalidating a WCA that assumed that at some point it would become clear that no health effect would result from herbicide spraying in view of agency's admission that no level of exposure had been proven safe).

41. 40 C.F.R. § 1502.22 (1985) (amended 1986).

policy change by arguing that the WCA requirement called for mere conjecture, and was therefore ineffective as a decisionmaking tool.⁴² Moreover, CEQ posited that including WCA in NEPA analyses was “an unsatisfactory approach”⁴³ that would mislead the public with “endless hypothesis and speculation.”⁴⁴ Several members of the U.S. Senate Committee on Environment and Public Works disagreed, and told CEQ that rescinding the WCA requirement would weaken NEPA’s informational benefits.⁴⁵ However, CEQ dismissed these concerns, and when environmental groups challenged the new regulation, the Supreme Court deferred to CEQ and upheld the new regulation.⁴⁶

CEQ had it precisely backwards when it amended the WCA regulation in 1986: it is the *failure* to disclose and analyze all potential environmental effects—especially in the face of uncertainty—that is misleading. Without the benefit of WCA, it is impossible for the public and the agency to assess the true costs and risks of a project and to compare them to the project’s purported benefits. Likewise, without the necessary information, it is equally impossible for the agency and the regulated industry to prepare effectively for disaster through emergency response plans and other measures. Moreover, the inclusion of WCA in an EIS can benefit the decisionmaking process in other ways, such as by highlighting opportunities for mitigation or by stimulating ongoing monitoring of potential trouble spots during the life of the project.

In the case of Deepwater Horizon, the industry and the agency failed to consider the “devastating sequence of equipment failures” that were clearly foreseeable but thought unlikely.⁴⁷ BP’s own exploration plan, approved by MMS in 2009, minimized the danger of a spill: “it is unlikely that an accidental oil spill release would occur from the proposed activities.”⁴⁸ Although BP acknowledged that, if a spill occurred, it could impact wetlands and beaches, it dismissed the significance of those potential impacts: “due to the distance to shore (48 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected.”⁴⁹ A proper WCA would have required BP and MMS to consider and plan for these exigencies, even if the risk of a significant spill seemed remote, and would have provided other federal, state, and local governments and

stakeholders with crucial information to facilitate response planning and implementation.

As it turned out, MMS did not even satisfy the watered-down replacement for the WCA requirement. The 1986 CEQ regulation requires agencies to analyze “reasonably foreseeable” consequences, including “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.”⁵⁰ In the BP case, MMS limited its analysis to the prospect of spills no larger than 4600 barrels of oil and completely ignored the risk of a serious spill.⁵¹ Further, in assessing the aggregate risks of all oil and gas drilling in the Gulf, MMS contemplated that no more than 21,000 barrels might be spilled over the entire forty-year life span of the program.⁵² In fact, the Deepwater Horizon released hundreds of times more than that—about *five million* barrels.⁵³

In August 2010, CEQ issued a report on NEPA policies, practices, and procedures relating to oil and gas exploration and development on the Outer Continental Shelf.⁵⁴ It recommended that the reformed and reorganized MMS, which is now named the Bureau of Ocean Energy Management, Regulation and Enforcement (“BOEMRE”), “[e]nsure that NEPA documents provide decisionmakers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities on the Outer Continental Shelf.”⁵⁵ This recommendation, while a marginal improvement over the watered down 1986 CEQ regulation, does not go far enough.

CEQ should reinstate the original 1978 WCA regulation in its entirety. Agencies should be compelled to perform WCA whenever they lack important information regarding the specific nature and extent of a proposed action’s potential impacts. This analysis should also include an indication of the probability of the worst-case scenario’s occurrence. Reinstating the WCA requirement is consistent with the congressional declaration of national policy articulated in NEPA, which states that agencies have a responsibility to avoid “unintended” environmental consequences.⁵⁶ Requiring WCA would also help fulfill NEPA’s twin goals of full disclosure to the public and fully informed, well reasoned decisionmaking by the agency.⁵⁷

42. 51 Fed. Reg. 15,620 (1986).

43. Proposed Rule, Council on Environmental Quality, 50 Fed. Reg. 32,234-01 (Aug. 9, 1985) (codified at 40 C.F.R. § 1502).

44. Final Rule, 51 Fed. Reg. 15,618, 15,620 (1986).

45. Valerie M. Fogleman, *Worst Case Analyses: A Continued Requirement Under the National Environmental Policy Act?*, 13 COLUM. J. ENVTL. L. 53, 56 (1987).

46. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 356, 359 (1989).

47. See DEEP WATER: THE GULF OIL DISASTER, *supra* note 29, at 122–26 (describing industry failures to assess or prepare for potential technology failures); Jeff Donn, H. Josef Hebert & Mitch Weiss, *Emerging Oil Rig Evidence Shows Lack of Regulation*, ASSOCIATED PRESS, May 13, 2010, <http://www.businessweek.com/ap/financialnews/D9FM3OHO0.htm>.

48. BP EXPLORATION & PROD., INC., INITIAL EXPLORATION PLAN: MISSISSIPPI CANYON BLOCK 252, at 14-3 (2009), [available at](http://www.biologicalldiversity.org/programs/public_land/energy/dirty_energy_development/oil_and_gas/gulf_oil_spill/pdfs/Drilling_plan_2009.pdf) http://www.biologicalldiversity.org/programs/public_land/energy/dirty_energy_development/oil_and_gas/gulf_oil_spill/pdfs/Drilling_plan_2009.pdf [hereinafter BP INITIAL EXPLORATION PLAN].

49. *Id.* at 14-5.

50. 40 C.F.R. § 1502.22 (1986).

51. See MINERALS MGMT. SERV., U.S. DEP’T OF THE INTERIOR, GULF OF MEXICO OSC OIL AND GAS LEASE SALES: 2007–2012, FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT 290 (2007), [available at](http://www.gomr.boemre.gov/PDFs/2007/2007-060.pdf) <http://www.gomr.boemre.gov/PDFs/2007/2007-060.pdf> [hereinafter FINAL SUPPLEMENTAL EIS].

52. FINAL EIS, *supra* note 26, at 4-244.

53. NAT’L COMM’N ON THE BP DEEPWATER HORIZON OIL SPILL & OFFSHORE DRILLING, STAFF WORKING PAPER NO. 3: THE AMOUNT AND FATE OF THE OIL 18 (2010), [available at](http://www.scribd.com/Amount-and-Fate-for-Release/d/38827407) <http://www.scribd.com/Amount-and-Fate-for-Release/d/38827407>. *Cf.* DEEP WATER: THE GULF OIL DISASTER, *supra* note 29, at vi (stating that more than four million barrels were spilled).

54. CEQ Report, *supra* note 24, at 1.

55. *Id.* at 2, 4.

56. 42 U.S.C. § 4331(b)(3) (2006).

57. *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 97 (1983).

Considering the worst-case scenario, and airing it publicly, probably would not have precluded BP's oil lease or the development of the Deepwater Horizon. Nonetheless, including a WCA in the NEPA analysis for the Deepwater Horizon would have made both the government and the public aware of the risk involved in drilling in that location. Further, it would have increased pressure on responsible parties to prepare for this kind of disaster *in advance*. Faced with the risk of an oil spill of this magnitude, BP and the government would be more likely to ensure that the blowout prevention systems were reliable and that an effective response and containment plan was in place *before* the catastrophe occurred. Given that deepwater development is becoming more pervasive—as of March 2011, there are 3387 active leases, 1638 approved drilling applications, and 26 active platforms—requiring WCA for future development activities is imperative.⁵⁸

B. Taking Shortcuts Through Improper Tiering and Categorical Exclusions

CEQ regulations authorize agencies to use “categorical exclusions to define categories of actions which do not individually or cumulatively have a significant effect on the human environment and which are therefore exempt from requirements to prepare an environmental impact statement.”⁵⁹ The exclusion of appropriate categories of actions from NEPA analysis makes sense. All agencies engage in actions, such as routine, minor administrative decisions, that legitimately deserve to be exempt from NEPA. Preparation of an EIS for such actions would be a pointless exercise, given their non-existent or benign effects.

Over the years, however, some agencies have abused the use of categorical exclusions by refusing to prepare EISs, or even EAs, for proposals that would have clearly created a non-trivial risk of significant effects.⁶⁰ Due to excessively broad application of the categorical exclusion process, many agency actions that pose serious risks are approved and implemented without any consideration of their potential environmental consequences.⁶¹ Further, the abuse of the categorical exclusion process allows these actions to proceed without public input because agencies often fail to provide public notice before granting categorical exclusions.⁶²

The BP oil spill illustrates the negative consequences that can result when agencies abuse categorical exclusions.

MMS approved BP's development and production plan for the Deepwater Horizon under a categorical exclusion.⁶³ As a result, MMS did not consider the potential environmental impacts of BP's plan on the immediately surrounding environment (Mississippi Canyon block 252). Instead, less than a month after BP submitted its plan, MMS approved it in a one-page letter.⁶⁴ The letter made no mention of the environmental risks the plan entailed, noting only that BP should “[e]xercise caution while drilling due to indications of shallow gas and possible water flow.”⁶⁵

In essence, MMS justified its categorical exclusion for BP's drilling plan on the basis that a NEPA analysis at that stage in the oil development program would have been duplicative of those conducted earlier. As explained above, MMS had conducted NEPA analyses at previous stages in the development of BP's Deepwater Horizon project, including a programmatic EIS purporting to analyze the potential regional impacts of the nationwide five-year oil and gas development plan, an EIS covering the Central Planning Area, and a supplemental EA for Lease Sale 206, of which the Deepwater Horizon project was a part.⁶⁶ These assessments concluded that the sale would have no significant environmental impacts.⁶⁷

The use of earlier analyses to substitute for more complete environmental evaluation of subsequent projects or project phases is known as “tiering.”⁶⁸ Tiering is intended to avoid duplicative analysis. If an agency has prepared an EIS on a broad program, there may be no need to repeat the analysis when it later considers individual projects that are components of the broader program. Tiering is justified, however, only when the potential effects of individual implementing actions have been fully considered at the programmatic stage.⁶⁹ Often it is impossible to engage in informed analysis of the effects of individual projects at the programmatic stage because the location or circumstances of those projects are not yet known.⁷⁰ In such cases, reliance on a program-

63. See *infra* notes 71–73 and accompanying text.

64. Letter from Michael Tolbert, on behalf of the Reg'l Supervisor of Field Operations, Mineral Mgmt. Serv., Dep't of the Interior, to Scherie Douglas, BP Exploration & Prod. Inc. (Apr. 6, 2009), available at <http://mardjokic.com/Website%20Files/BP%20Deep%20Horizon%20Permit%20MMS%20Approval.pdf>.

65. *Id.*

66. See MINERALS MGMT. SERV., U.S. DEP'T OF THE INTERIOR, PROPOSED GULF OF MEXICO OCS OIL AND GAS LEASE SALE 206, CENTRAL PLANNING AREA, ENVIRONMENTAL ASSESSMENT (2007), available at <http://www.gomr.boemre.gov/PDFs/2007/2007-059.pdf>.

67. See *supra* notes 24–30 and accompanying text.

68. 40 C.F.R. § 1508.28 (1986).

69. See *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 997 (9th Cir. 2004) (finding tiered analyses flawed due to failure to include specific information on cumulative effects).

70. One district court explained that:

Because programmatic statements are primarily concerned with analyzing the cumulative or synergistic environmental impacts of a program as a whole, they generally are unable to reflect a considered analysis of the particularized aspects of individual federal actions. Yet such analysis of particularized aspects of individual federal actions must be performed under the mandate of section 102(2)(C). Thus, “site-specific” EIS's will usually be necessary to supplement the environmental analysis of a programmatic impact statement.

NRDC v. Adm'r, Energy Research and Dev. Admin., 451 F. Supp. 1245, 1258 (D.D.C. 1978), *aff'd in relevant part sub nom.* NRDC v. U.S. Nuclear Regula-

58. *Offshore Statistics by Water Depth*, DEP'T OF THE INTERIOR, BUREAU OF OCEAN ENERGY MGMT., REGULATION & ENFORCEMENT, <http://www.gomr.boemre.gov/home/peg/fastfacts/WaterDepth/WaterDepth.html> (last visited Mar. 22, 2011).

59. 40 C.F.R. §§ 1500.4(p), 1500.5(k).

60. See Kevin H. Moriarty, Note, *Circumventing the National Environmental Policy Act: Agency Abuse of the Categorical Exclusion*, 79 N.Y.U. L. REV. 2312 (2004).

61. See *id.* In its final guidance on the use of categorical exclusions issued in 2010, CEQ recognized the potential for abuse of the categorical exclusion mechanism. Final Guidance for Federal Departments and Agencies on Establishing, Applying, and Revising Categorical Exclusions Under the National Environmental Policy Act, 75 Fed. Reg. 75,631–75,632 (Dec. 6, 2010) [hereinafter CEQ Final Guidance].

62. CEQ Final Guidance, *supra* note 61, at 75,636 (stating that “[m]ost Federal agencies do not routinely notify the public when they use a categorical exclusion to meet their NEPA responsibilities”).

matic EIS to justify the exclusion of individual projects from subsequent NEPA analysis disguises the agency's failure to ever consider site-specific, project-level effects, even if they are potentially catastrophic.

The categorical exclusion used to approve BP's development and production plan appears in a Department of the Interior manual governing the application of NEPA to MMS agency actions that occur later in the OCSLA development program.⁷¹ The range of actions excluded by the manual is remarkable, from environmentally innocuous actions such as "approval of Sundry Notices and Reports on Wells" to those with the potential to create major environmental disruption, such as "[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."⁷² The latter exclusion covered BP's plan.⁷³

Even a cursory look at MMS's invocation of the categorical exclusion for the Deepwater Horizon plan shows that the tiering of NEPA analyses is inappropriate in the context of approving drilling plans. MMS used the exclusion, coupled with tiering, to sweep the potential risks of drilling a deep-water well in that location under the rug.

The previous EISs and EA were flawed because they relied on unrealistically optimistic assumptions about the likelihood of an oil spill and the industry's capability to contain one if it occurred. The programmatic EIS analyzed the possibility of only one spill of about 4600 barrels of oil and other smaller spills, and MMS assumed that no more than 26,500 barrels could be spilled into the Central Planning Area for the entire forty-year duration of the oil and gas development program.⁷⁴ Equally damning, BP's 2009 regional spill plan is riddled with meaningless boilerplate instead of careful analysis.⁷⁵ For example, it lists walruses, sea lions, and seals as "sensitive biological resources" in the Gulf.⁷⁶ It is true that the blowout did not, in fact, affect any of these creatures, *because none of them resides anywhere near the Gulf*.⁷⁷ One can only assume that the language was lifted from Arctic or Pacific plans. Somehow no one in charge noticed the discrepancy or drew the obvious conclusion that the inapposite references

were indicative of a poorly performed cut-and-paste job, rather than the careful, site-specific environmental analysis that NEPA demands. In and of itself, this was a fatal defect in the analysis.⁷⁸ As the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling noted in its 2011 report to the President, "[a]s applied by MMS, tiering was not always consistent with its original purposes: instead, it created a system where deeper environmental analysis at more geographically targeted and advanced planning stages did not always take place."⁷⁹ Professor Oliver Houck's metaphor vividly describes the problem:

[T]he environmental reviews that accompanied these decisions resembled a stack of babushka dolls, each couching a smaller one, each painted identically and saying the same misleading thing. In the dance that followed . . . something ironic and ultimately deadly happened: the NEPA process not only failed its mission to enlighten critical O[uter] C[ontinental] S[helf] decisions, it obfuscated and in the end undercut them.⁸⁰

The whitewashing of the prospect of a significant spill, and its effects on the Gulf ecosystem, makes the agency's reliance on a categorical exclusion for BP's plan impossible to justify. The agency simply accepted at face value, without any independent evaluation or verification, BP's dubious assertions that:

- Site specific environmental conditions have been taken into account for the proposed activities and no impacts are expected as a result of these conditions;⁸¹
- Due to the distance to shore (forty-eight miles) and response capabilities, no significant effects on wetlands are expected;⁸²
- Any unanticipated blowout resulting in a spill is unlikely to have an impact based on industry wide standards for using proven equipment and response technologies;⁸³ and
- In the event of a spill, only "sub-lethal" effects on fish and marine mammals would occur.⁸⁴

Remarkably, the drilling plan admits that "[n]o alternatives to the proposed activities were considered to reduce environmental impacts" and that "[n]o agencies or persons were consulted regarding potential impacts associated with the proposed activities."⁸⁵

tory Comm'n, 606 F.2d 1261 (D.C. Cir. 1979). Cf. *Salmon River Concerned Citizens v. Robertson*, 32 F.3d 1346 (9th Cir. 1994) (approving programmatic EIS on vegetation control during reforestation projects, but allowing the Forest Service to defer consideration of cumulative impacts to site-specific impact statements only on the ground that the agency would be estopped from arguing later that it need not consider cumulative impacts in the context of specific herbicide applications).

71. DOI MANUAL, *supra* note 30, at 516 DM 15.4(C)(10), (14) (2004).

72. *Id.*

73. This categorical exclusion is a slight modification of an exclusion adopted by the U.S. Geological Survey ("USGS") when it supervised offshore drilling. USGS provided no explanation as to why these actions should be categorically excluded. Notice of Final Revised Instructions, 46 Fed. Reg. 7,485, 7,486-87 (Jan. 23, 1981) (regarding implementing procedures for NEPA).

74. See FINAL SUPPLEMENTAL EIS, *supra* note 51, at 290; FINAL EIS, *supra* note 26, at 4-243.

75. See Andrew Clark, *BP Contingency Plan for Dealing With Oil Spill Was Riddled With Errors*, THE GUARDIAN, June 9, 2010, <http://www.guardian.co.uk/environment/2010/jun/09/bp-oil-spill-contingency-plan/print>.

76. *Id.*; see generally BP, GULF OF MEXICO REGIONAL OIL SPILL RESPONSE PLAN, sec. 11, fig.11-3 (2000), available at <http://info.publicintelligence.net/BP-GoMspillresponseplan.pdf>.

77. See Andrew Clark, *supra* note 75.

78. See *NRDC v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988) (remanding the Department of Interior's EIS for the outer continental shelf leasing program in the Pacific and Alaskan regions for failure to assess the cumulative impact of development on migratory species, and holding that perfunctory boilerplate style references do not constitute adequate analysis under NEPA).

79. DEEP WATER: THE GULF OIL DISASTER, *supra* note 29, at 260.

80. Oliver A. Houck, *Worst Case and the Deepwater Horizon Blowout: There Ought to be a Law*, 40 ENVTL. L. REP. NEWS & ANALYSIS 11033, 11037 (2010).

81. BP INITIAL EXPLORATION PLAN, *supra* note 48, at 14-2 to -4.

82. *Id.* at 14-6.

83. *Id.* at 14-4.

84. *Id.* at 14-3 to -4.

85. *Id.* at 14-12.

If ever a project were *unsuitable* for categorical exclusion, this was it. Indeed, MMS's own manual explicitly prohibited the use of exclusions for facilities "[i]n areas of . . . relatively untested deep water, or remote areas, . . . or areas of high biological sensitivity; . . . or utilizing new or unusual technology."⁸⁶

MMS at least needed to justify why the manual's bar on categorical exclusions for offshore oil and gas projects in "relatively untested deep water," "areas of high biological sensitivity," or when the projects used "new or untested technology" did not preclude the issuance of a categorical exclusion for the Deepwater Horizon. Similarly, both CEQ and Department of the Interior regulations preclude a categorical exclusion if "extraordinary circumstances" exist.⁸⁷ These include actions with significant impacts on public health or safety, significant impacts on natural resources such as wetlands, highly uncertain and potentially significant environmental effects or unique or unknown environmental risks, a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects, or significant impacts on endangered or threatened species.⁸⁸ A drilling project such as the Deepwater Horizon raised serious questions in each of those areas.

Since the blowout, the government has begun exploring possible changes in the use of categorical exclusions for oil and gas development.⁸⁹ CEQ's 2010 report on MMS's compliance with NEPA in connection with administration of its offshore drilling program recommends that BOEMRE "[r]eview the use of categorical exclusions for Outer Continental Shelf oil and gas exploration and development in light of the increasing levels of complexity and risk—and the consequent potential environmental impacts—associated with deepwater drilling [and] [d]etermine whether to revise these categorical exclusions."⁹⁰

Several months after BP capped the Deepwater Horizon well,⁹¹ CEQ issued new, generally applicable guidance on categorical exclusions.⁹² According to CEQ, the expanded use of categorical exclusions "underscor[es] the need for . . . guidance" about their promulgation and use.⁹³ Categorical exclusions are no longer the rare exception to the need for NEPA compliance, but "the most frequently employed method of complying with NEPA."⁹⁴ Significantly, the guidance recognizes that "[i]f used inappropriately, categorical exclusions can thwart NEPA's environmental stewardship goals, by compromising the quality and transparency of agency environmental review and . . . the opportunity for meaningful public participation and review."⁹⁵

CEQ's guidance includes worthy changes that confine categorical exclusions to the narrow circumstances for which they were envisioned—proposed actions that have no prospect of creating significant environmental effects and for which environmental assessment would provide no useful information. The guidance provides that agencies considering a new exclusion gather and evaluate information,⁹⁶ as well as issue findings to support any conclusion that the excluded activities will not result in significant environmental effects, either individually or cumulatively.⁹⁷ Agencies must similarly document the application of existing categorical exclusions, and provide supporting analysis for why an exclusion is not barred by extraordinary circumstances.⁹⁸ The guidance also provides that agencies should periodically review existing exclusions to ensure that the predictions of minimal environmental effects on which they were based have turned out to be accurate, that circumstances have not changed so as to demand revocation of or limitations on those exclusions, and that unanticipated extraordinary circumstances have not occurred in connection with excluded projects.⁹⁹ All of these revisions should help avoid egregious applications of categorical exclusions such as the one MMS approved for the Deepwater Horizon. Indeed, the guidance specifically uses MMS's application of categorical exclusions to deepwater drilling as an example of when evolving conditions, the discovery of new risks, and the use of new technologies undercut the justification for pre-existing categorical exclusions.¹⁰⁰

The guidance, however, does not go far enough to ensure public involvement when agencies resort to categorical exclusions. Although CEQ has "strongly encourage[d] public involvement in the establishment and revision of categorical exclusions,"¹⁰¹ it has done less to assure such involvement in the application of categorical exclusions. CEQ instead emphasized the need for agency flexibility in determining the appropriate level of public engagement. Indeed, the guidance acknowledges that "[m]ost federal agencies do not routinely notify the public when they use a categorical exclusion," however "[t]here are *some circumstances* . . . [in which] the public may be able to provide an agency with valuable information, such as whether a proposal involves extraordinary circumstances or potentially significant cumulative impacts that can help the agency decide whether to apply a categorical exclusion."¹⁰² Public engagement should be the norm, not the exception. The default position should require agencies to notify and seek input from the public on the application of a categorical exclusion, with the agency bearing the burden of justifying a failure to do so. In any event, BOEMRE should exercise the discretion afforded it by the guidance to make public notification and comment solicitation a routine part of the application of any categorical exclusions to offshore drilling activities.

86. DOI MANUAL, *supra* note 71 at § 15.4(C)(10).

87. 40 C.F.R. § 1508.4 (1986); 43 C.F.R. § 46.215 (2011).

88. 40 C.F.R. § 1508.27. For an analysis of Endangered Species Act ("ESA") issues, and how reliance on flawed NEPA analyses undercut the efficacy of ESA consultations, see FLOURNOY ET AL., *supra* note *, at 38–42.

89. 75 Fed. Reg. 29,996 (May 28, 2010).

90. CEQ Report, *supra* note 24, at 5.

91. *Times Topics: Gulf of Mexico Oil Spill*, *supra* note 1 (finding well capped in July 2010).

92. CEQ Final Guidance, *supra* note 61.

93. *Id.* at 75,632.

94. *Id.*

95. *Id.*

96. *Id.* at 75,633.

97. *Id.* at 75,634.

98. *Id.* at 75,636.

99. *Id.* at 75,636–37.

100. *Id.* at 75,637.

101. *Id.* at 75,629.

102. *Id.* at 75,636 (emphasis added).

CEQ guidance also addresses the value of having an agency proposing a categorical exclusion seek input from other agencies with relevant expertise. The preamble to the guidance provides that agencies “should consider information and records from . . . other Federal agencies that have experience with the actions covered in a proposed categorical exclusion.”¹⁰³ Again, however, this recommendation is not binding, and the lead agency retains the right to determine whether and what kind of inter-agency consultation in which it is willing to engage. This recommendation does not go far enough. Absent a compelling justification to the contrary, before the Department of the Interior uses a categorical exclusion for an offshore drilling activity it should solicit the views of agencies that have expertise in the aquatic environment, such as the National Oceanic and Atmospheric Administration and the Environmental Protection Agency. Further, when an expert agency opposes a categorical exclusion, there should be a presumption against its creation. The presumption would shift the burden to the proposing agency to demonstrate both that the project would not, individually or cumulatively, have significant effects and that no extraordinary circumstances exist that would make the use of an exclusion inappropriate. In all likelihood, it would be very difficult to rebut the presumption for a deepwater drilling project. In its 2011 Report to the President, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling stated that “in the aftermath of the BP *Deepwater Horizon* spill, it is difficult to argue that deepwater drilling is an activity that does not present at least some potentially significant risk of harm to the environment of the Gulf.”¹⁰⁴

If MMS had done a better job at the NEPA analyses, and if it had actually analyzed the drilling plan instead of categorically excluding it from analysis, would it have made a difference? It is reasonable to think the answer is yes. MMS is authorized to allow the exploration stage to proceed only if it finds that the lessee’s plan “will not be unduly harmful to aquatic life in the area, result in pollution, create hazardous or unsafe conditions, unreasonably interfere with other uses of the area, or disturb any site, structure, or object of historical or archeological significance.”¹⁰⁵ Subsequently, at the development and production stage, MMS is expected to review an additional, detailed plan.¹⁰⁶ If MMS finds that “the plan would probably cause serious harm or damage to life (including fish and other aquatic life) . . . or to the marine, coastal or human environments,” the plan shall be disapproved and the lease may be terminated.¹⁰⁷ If BP and MMS had taken a hard look at the potential for harm to humans, aquatic life, and the surrounding environment, the Deepwater Horizon plan might not have been approved.

C. Agency Capture and NEPA

The “captive agency” theory—first enunciated in 1955 by Professor Marver Bernstein—postulates that federal agencies have a tendency to move so far in the direction of accommodating the interests of the entities they are charged with regulating that ultimately those agencies may fairly be seen as a “captive” of the regulated entities.¹⁰⁸ The theory views regulators as subject to unique pressures and influences which invariably push their actions and policies in a direction favored by regulated firms and away from the public’s best interests.¹⁰⁹ Among other things, the theory posits that captive agencies tend to be unduly passive, ponderous, and inefficient, failing to enforce regulatory requirements with needed vigor and enthusiasm.¹¹⁰

MMS’s inattentive—if not disdainful—implementation of NEPA, in the context of its hasty approval of BP’s plans for the Deepwater Horizon, supports this theory. MMS freely accepted BP’s blanket assurances that the environmental risks were either minimal or non-existent.¹¹¹ One can safely assume that this uncritical acceptance of BP’s assessment had something to do with MMS’s desire to promote the expansion of oil and gas development in the Gulf. As a result, MMS’s failure to take NEPA seriously flouted the statute’s directive to have unbiased, responsible officials analyze and weigh the potential consequences of federal actions—including the granting of federal leases, licenses, and permits for private activities.¹¹²

Since the Deepwater Horizon blowout, the executive branch has taken steps to address agency capture within the Department of the Interior by creating BOEMRE and by dividing up some of the duties formerly held by MMS.¹¹³ Previously, MMS had three different jobs: it was a “cheerleader” charged with promoting the development of offshore oil drilling; it was a revenue collector; and it oversaw the safety of drilling operations.¹¹⁴ Testimony before a 2010 U.S. Senate subcommittee on the vagaries of agency capture concluded that, “[a]gainst [MMS’s] conflict-ridden backdrop, it is unsurprising that the agency gave short shrift to its safety mission.”¹¹⁵ The implementation of mechanisms, or “metrics,” that maintain focus on an agency’s core statutory mission and encourage consistent oversight by an independent watchdog could help prevent capture and the kind of regula-

103. *Id.* at 75,629.

104. DEEP WATER: THE GULF OIL DISASTER, *supra* note 29, at 260.

105. 43 U.S.C. § 1340(g)(3) (2006).

106. 43 U.S.C. § 1351(c).

107. 43 U.S.C. § 1351(h)(1)(D), (j).

108. MARVER H. BERNSTEIN, REGULATING BUSINESS BY INDEPENDENT COMMISSION 3–4 (1955). A seminal article on “agency capture” in the legal scholarship is Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, 1713 (1975).

109. See Stewart, *supra* note 108, at 1715.

110. See *id.* at 1681–86.

111. See *supra* Part IV.B.

112. See 42 U.S.C. § 4332 (2006).

113. See Order of the Secretary of the Interior No. 3299 (May 19, 2010), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=32475>.

114. See *Protecting the Public Interest: Understanding the Threat of Agency Capture: Hearing Before the Subcomm. on Admin. Oversight and the Courts of the S. Comm. on the Judiciary*, 111th Cong. 8 (2010) (statement of Nicholas Bagley, Assistant Professor of Law, University of Michigan Law School).

115. *Id.*

tory failures that happened here.¹¹⁶ In addition, reforming the NEPA process to ensure that worst-case scenarios are disclosed and analyzed and to preclude the improvident use of categorical exclusions and tiering is an additional step that must be taken to mitigate the pressure placed on the regulatory agency.¹¹⁷

V. Conclusion

The Deepwater Horizon tragedy highlights the need for significant legal reforms. In the aftermath of the blowout, BOEMRE has begun to develop another EIS to supplement the NEPA analyses for the Central and Western Planning Area Lease Sales in the 2007–2012 Outer Continental Shelf Program.¹¹⁸ It pledges to consider new circumstances and information arising from the blowout. According to BOEMRE, the supplemental analysis “will focus on updating the baseline conditions and potential environmental effects of oil and natural gas leasing, exploration, development, and production” in the Gulf.¹¹⁹ BOEMRE should take full advantage of this opportunity to remedy the shortcomings of MMS’s past practices. BOEMRE should fully assess the worst-case scenarios of leasing activities, the potential direct and indirect effects of catastrophic oil spills on human and ecological communities, and the cumulative effects of ongoing and new activities in the Gulf. Moreover, CEQ should require agencies such as BOEMRE to perform worst-case analyses and to open themselves to more regular and robust criticism by other government agencies and stakeholders—other than the agency with primary responsibility for that project—so that all potential risks of harm will be identified and analyzed in a rigorous, accurate, and unbiased manner.

116. See *Protecting the Public Interest: Understanding the Threat of Agency Capture: Hearing Before the Subcomm. on Admin. Oversight and the Courts of the S. Comm. on the Judiciary*, 111th Cong. 13–14 (2010) (statement of Sidney A. Shapiro, University Distinguished Chair in Law, Associated Dean for Research and Development, Wake Forest Law School, and Member Scholar, Vice-President, Center for Progressive Reform) (describing how systematic oversight and the use of positive metrics could alleviate agency capture); Sidney Shapiro & Rena Steinzor, *Capture, Accountability, and Regulatory Metrics*, 86 TEX. L. REV. 1741, 1769–70 (2008).

117. See *supra* Part IV.A, IV.B.

118. Notice of Intent to Prepare a Supplemental Environmental Impact Statement, 75 Fed. Reg. 69,122, 69,122 (Nov. 10, 2010).

119. *Id.*