The Conservation Foundation's Proposed "Environmental Protection Act": Prospects and Problems for an Integrated Pollution Control Code for the United States

Robert F. Blomquist

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THE CONSERVATION FOUNDATION'S PROPOSED
"ENVIRONMENTAL PROTECTION ACT": PROSPECTS
AND PROBLEMS FOR AN INTEGRATED POLLUTION
CONTROL CODE FOR THE UNITED STATES

Robert F. Blomquist*

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INTRODUCTION

As cogently noted by Steven Kelman, Professor of Public Policy and Government at Harvard University, “the policy-making process does not live up to the ideals we have for it.” Indeed, a concrete illustration of this cynical assessment is American environmental law and policy.

While much has been accomplished in American environmental policy since the advent of modern environmental law during the 1960s, some commentators criticize the existing fragmented model of environmental management, which divides problems into discrete and disconnected media categories of air pollution, water pollution, and solid waste. These critics contend that the current system is ineffective and in need of fundamental reform. As explained by one commentator:

[M]any riveting and accelerating environmental problems, such as the threats posed by toxic substances and acid deposition, may be painful indicators that the existing management system is not only fragmented, but porous as well. These dilemmas can be characterized as “cross-media” problems because they involve the transfer, transport, and transformation of pollutants across media and thus defy measurement or regulation within a single medium. A more comprehensive approach to environmental management may increasingly be necessary, both on environmental and economic grounds.8

3. B. Rabe, Fragmentation and Integration in State Environmental Management 5 (1986); see also Guruswamy, Integrating Thoughtways: Re-Opening of the Environmental Mind?, 1989 Wis. L. Rev. 463 (noting that the twin goals of efficiency and effectiveness in environmental policy could be better satisfied by adopting an integrated approach to pollution
Notwithstanding its preoccupation with fragmented, single media pollution control programs, the United States government has experimented with assorted policy measures for integrating pollution control over the years. At the end of the sixties and outset of the seventies, two important environmentally integrative steps were taken. First, in 1969 Congress enacted the National Environmental Policy Act ("NEPA") which introduced the concept of an environmental impact statement in evaluating major federal projects that have the potential of significantly affecting the human environment. Second, President Nixon created the Environmental Protection Agency ("EPA") in 1970, thereby drawing into one federal agency diverse environmental programs that had previously been scattered among a hodge-podge of governmental entities. Moreover, during 1976, Congress enacted the Toxic Substances Control Act ("TSCA") as a pioneering effort in integration by controlling chemicals.

In the late 1970s, the EPA made some attempts to integrate permitting programs. Integration approaches during the 1980s can best be described as a shift towards "demonstration projects focusing on particular industries or regions using risk as a common measure for comparisons."

Despite these atypical policy innovations, the nation has not come close to achieving integrated environmental management at either the federal or state levels. Yet, in recent years, a variety of private and public institutions have examined both the need for environmental media integration and potential means for achieving integration. Reports have been issued by the National Research Council, the Council on Environmental Quality ("CEQ"), the National Academy of Public Administration, and the EPA Science Advisory Board on Environmental Studies and Toxicology, Commission on Physical Sciences, Mathematics, and Resources, National Research Council, Multimedia Approaches to Pollution Control: A Symposium Proceedings (1987).

5. Id. § 4332(2)(C) (requiring environmental impact statements to be submitted with any federal agency's recommendation or report on proposals for "major federal actions significantly affecting the quality of the human environment").
7. Id. "The EPA was founded by a presidential executive order calling for a major reorganization of 15 existing federal agencies working on important environmental issues." Id.
9. Haigh & Irwin, What Are the Options?, in Integrated Pollution Control in Europe and North America 33 (1990) [hereinafter Integrated Pollution Control].
10. Id.
11. Id.
13. See Committee on Multimedia Approaches to Pollution Control, Board on Environmental Studies and Toxicology, Commission on Physical Sciences, Mathematics, and Resources, National Research Council, Multimedia Approaches to Pollution Control: A Symposium Proceedings (1987).
Board. The Conservation Foundation has also published several books on the subject of integrated pollution control. In addition, the Conservation Foundation, with the cooperation of the EPA, drafted a comprehensive Environmental Protection Act ("the Act"). Primarily drafted as a research tool, the proposed act was intended to "determine what an integrated approach to pollution control might look like and what problems and opportunities might be presented by such an approach."  

This Article, divided into three principal parts, examines the wisdom of the Conservation Foundation's proposed Environmental Protection Act. Part I addresses the five asserted rationales for the federal integrated pollution code. Part II describes the key provisions of the proposed Act, which include reorganization of the EPA, streamlined federal pollution control standards, and a unified permitting system. Finally, Part III analyzes the prospects and problems of the proposed federal legislation.

I. THE RATIONALE FOR THE CONSERVATION FOUNDATION'S PROPOSAL

A. The Complex Nature of Environmental Problems

In the commentary that accompanies the Environmental Protection Act, the Conservation Foundation observes that numerous environmental problems "require an integrated approach for their solution." Most environmental problems are complex and manifest themselves in more than one media. Their

19. Id., rationale at 1.
20. The Conservation Foundation provides the following disclaimer:
   This document was written primarily by Terry Davies, Executive Vice President of the Conservation Foundation. Although the Foundation endorses the basic concept of a more integrated approach to pollution control, the specific provisions contained in the Environmental Protection Act do not necessarily represent positions of the Conservation Foundation.
   The purpose of the Act is to stimulate discussion and to serve as a focus for consideration of pollution control integration.
   Id. at i. Notwithstanding this disclaimer, it is reasonable to refer to the Environmental Protection Act as the Conservation Foundation's proposal because the project was undertaken by the Conservation Foundation, and there is no indication that the Conservation Foundation disputes any portion of the proposal. Therefore, reference to the Environmental Protection Act throughout this Article assumes endorsement by the Conservation Foundation.
   In 1989, J. Clarence (Terry) Davies, the author of the Conservation Foundation Environmental Protection Act, became assistant administrator for policy, planning, and evaluation for the U.S. Environmental Protection Agency.
21. Id., rationale at 1.
cure, therefore, requires attention at different levels. Viewing the policy dilemma as a choice between outmoded single-media pollution control programs and a comprehensive multimedia approach, Terry Davies, writing for the Conservation Foundation, provides a compelling example of the complex nature of current environmental issues:

We are unlikely to be able to successfully control pollution from heavy metals or many organic chemicals by focusing exclusively on one part of the environment at a time because these substances are present in air and water and land and frequently move from one medium to another. In the Great Lakes, which provide insight into pollution problems in many other places, the major part of the toxic pollution comes from air deposition, sediment, groundwater, and land run-off. 80-90% of the PCBs in the lakes are deposited there from the atmosphere. The single-medium focus in these kinds of situations will either shift the pollution from one medium to another, sometimes making the situation worse, or simply fail to understand or detect the problem altogether.\(^2\)

Thus, according to the Conservation Foundation, the complex nature of environmental problems is a major reason why a more integrated approach to pollution control would benefit the nation.

B. The Need for Better Priority Setting

The Conservation Foundation criticizes the haphazard nature of current environmental priorities, which it contends "are based on historical circumstances, custom, and political visibility."\(^2\) Therefore, the Conservation Foundation implicitly asserts that analysis of the "degree of risk" is the only rational way of setting "priorities among different programs or even among different control measures."\(^2\) According to this view, the rationality of risk assessment is based on its "common scale for making comparisons"\(^2\) in a presumably objective milieu. This objective milieu would be provided under an integrated approach to environmental management.

C. Ineffective Pollution Control Technologies

A telling deficiency of current pollution control technologies is that, in many instances, technologies "now used to meet regulatory requirements do not really control the pollution—they simply shift it around or change its form or delay its release into the environment."\(^2\) Indeed, according to the Conservation Foundation, an EPA review "found that a typical water waste treatment plant controlled only about half the toxic substances that went into it. Of the other half, 15% went to the land in the form of sludge, 20% volatilized and

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22. Id. at 1-2.
23. Id. at 2.
24. Id. (emphasis in original).
25. Id.
26. Id.
became air pollutants, and the remaining 15% were discharged back to the water."

The Conservation Foundation contends that "[a] more integrated approach is necessary" to properly handle modern environmental degradation. Echoing the views of the congressional Office of Technology Assessment ("OTA"), the Conservation Foundation urges that "[e]mphasis must be placed on preventing pollution from occurring. This involves changes in the plant processes rather than 'end-of-the-pipe' solutions."

D. Inefficient Pollution Control Policies

The Conservation Foundation refers to considerable evidence that an integrated system would not only be more effective in enhancing environmental quality, it would also reduce the actual cost of pollution control. By way of illustration, the Conservation Foundation cites an Electric Power Research Institute report which shows "that an integrated approach to pollution control applied to a new coal-fired power plant would reduce the capital and operating costs of the plant's pollution control system by 25%.

E. The Need for Better Problem Identification

Referring to the "acid rain problem" and the "stratospheric ozone problem" as illustrations of cross-media problems, the Conservation Foundation argues that "the current fragmented system is a major impediment to identifying new environmental problems." In addition, political myopia leads to incomplete solutions.

Under the current system the physical law of the conservation of matter is replaced by the political law of the protection of narrow jurisdictions. Nobody asked what happened to sulfur oxides and nitrogen oxides that were transported long distances, because as long as they weren't air pollutants in the vicinity of the source they weren't anybody's concern. . . . Nobody asked what happened to the CFCs after they were released because that wasn't in anybody's regulatory jurisdiction.

27. *Id.* The Conservation Foundation asserts that "[t]his is not a theoretical problem. For several years the Philadelphia municipal water waste treatment plant was the largest single source of air pollution in the Philadelphia metropolitan area." *Id.* (emphasis omitted).

28. *Id.* at 3.

29. *See generally Office of Technology Assessment, U.S. Congress, Serious Reduction of Hazardous Waste: For Pollution Prevention and Industrial Efficiency* 3 (1986) [hereinafter OTA Report] (taking the position that waste reduction is an economically sensible solution to the perceived "hazardous waste crisis").


31. *Id.* (emphasis omitted).

32. *Id.*

33. *Id.* (emphasis omitted).

34. *Id.*
The Conservation Foundation has presented five incisive reasons why an integrated approach to environmental problems is a compelling alternative that deserves further consideration. The next section examines the key provisions of the proposed Environmental Protection Act.

II. **KEY PROVISIONS OF THE PROPOSED ENVIRONMENTAL PROTECTION ACT**

In order to achieve an integrated environmental system, the proposed Act includes several significant changes from the present system. First, the Act creates a cabinet-level Department of Environmental Protection. Second, the Act defines a six-factor unreasonable risk standard to evaluate whether the department should take action. Finally, the Act adopts a unified permitting system to replace the present fragmented and confusing system.

A. Establishment of a New Department of Environmental Protection with Expanded Responsibilities

1. Cabinet Status

The Environmental Protection Act would create a cabinet-level federal Department of Environmental Protection (“DEP”). The DEP would be comprised primarily of the current EPA and the National Oceanic and Atmospheric Agency (“NOAA”). This is an aggressive step, but arguably a necessary one in that it properly recognizes the importance of environmental problems. After formation, the Conservation Foundation estimates that the Department would be larger than five existing federal departments in terms of personnel, and bigger than four federal departments in terms of budget.

Section 202 of the proposed Act delineates the governmental functions that would be transferred to the new DEP. The department would be responsible for all functions of the current EPA and most functions of the current NOAA. While the EPA’s functions would be “the core” of the reconstituted department, the Conservation Foundation asserts that the NOAA functions [would be] equally important to the mission and pur-

35. *Id.*, analysis at 2; see *id.* §§ 201-202.

36. *See id.*, analysis at 2. The Conservation Foundation contends that while “[t]here are several reasons to give cabinet status to environmental problems, the primary one [is] . . . the importance of the function . . . such that it should be recognized in the cabinet.” *Id.* See generally *Creation of a Department of Environmental Protection: Hearings on S. 2006 Before the Senate Comm. on Governmental Affairs*, 101st Cong., 2d Sess. 103-10 (1990) (statement of J. Dexter Peach, U.S. General Accounting Office) (discussing the possible organizational structure of a federal environmental agency and the perceived benefits of a cabinet-level status for the EPA).

37. **ENVIRONMENTAL PROTECTION ACT**, analysis at 2 (Conservation Foundation, 2d Draft 1988). The DEP would be larger than the Departments of Commerce, Labor, Housing and Urban Development, Energy, and Education in terms of personnel, and bigger than the Departments of Commerce, Interior, State, and Justice in terms of budget. *Id.*

38. *Id.* § 202 analysis at 4; see *id.* § 202. The department would not undertake NOAA responsibilities for marine resources and mammals, ocean mining and energy exploration, or the National Sea Grant Program.
pose of the new agency . . . [because these] functions can greatly strengthen the scientific basis of regulation, can allow the new agency to anticipate and thereby prevent new environmental problems, and can ground environmental research and data gathering on the needs of society.\textsuperscript{39}

The goal of this combination is a "synergistically beneficial effect on both programs."\textsuperscript{40}

In light of the ostensible goal of integrated environmental management inherent in the proposed Environmental Protection Act,\textsuperscript{41} it is somewhat surprising that the Conservation Foundation does not propose the merger of numerous other environmental programs into the department. In a vague explanation of this omission, the Act's commentary acknowledges the merits of such a suggestion but argues that "it should be clear that the Department of Environmental Protection will not and should not encompass all the functions that its name implies. These functions are just too diverse and broad and, in some cases, too closely related to other functions."\textsuperscript{42}

\begin{itemize}
  \item \textsuperscript{39} Id. § 202 analysis at 4.
  \item \textsuperscript{40} Id. The commentary explains that "[t]he emphasis on prevention, on risk, and on a comprehensive approach that this Act provides will make research and data gathering much more important." Id.
  \item \textsuperscript{41} According to the Proposed Act:
    \begin{itemize}
      \item (a) The mission of the Department is to—
        \begin{itemize}
          \item 1. protect and improve the quality of the environment;
          \item 2. protect the public from actual and potential unreasonable risks, including the risks from water, products, and other substances that may be found in the environment;
          \item 3. identify, analyze, monitor, and report on existing and potential unreasonable risks to humans and the environment;
          \item 4. assist State, regional, and local government agencies in protecting humans and the environment from unreasonable risks.
        \end{itemize}
      \item (b) In undertaking its mission, the Department shall be guided by the goal of improving overall environmental quality as effectively and efficiently as possible.
      \item (c) In undertaking its mission, the Department shall cooperate with other government agencies, other nations, international agencies, and the general public. It shall Act [sic] at all times in such a way as to promote respect for and trust in the actions and decisions of the U.S. government.
    \end{itemize}
  \item \textsuperscript{42} Id. § 202 analysis at 5. The commentary lists some of the other programs that could have broadened the DEP's authority:
    There is no shortage of other programs that have been suggested as belonging in a Department of Environmental Protection. These include, among others, the interior surface mining program, the Corps of Engineers functions under section 404 of the Clean Water Act, the regulatory functions of the Nuclear Regulatory Agency and Department of Energy, the functions of the Consumer Product Safety Commission,
2. Function over Media

The new cabinet-level Department of Environmental Protection would be headed by a Secretary of Environmental Protection ("the Secretary"), under whom Congress would establish numerous departmental officials. Section 201 of the Act provides that, in addition to the Secretary, the DEP will have an Under Secretary, a Deputy Secretary, ten Assistant Secretaries, ten Deputy Assistant Secretaries, and ten Regional Administrators.

The heart of the Act's administrative scheme appears to be the Assistant Secretaries who would be predominantly responsible for functional duties "in contrast to the media organization that currently characterizes the EPA." Six of the Assistant Secretaries would be assigned the following titles: Enforcement, Standard-Setting, Information and Monitoring, Planning and Budgeting, International Relations, and Administration. These specific titles reflect the importance the Act places upon certain functions, especially monitoring, international relations, and planning. Outside of these specific functional categories, however, the Secretary would be given flexibility to organize other duties and to delegate administrative responsibilities to the four other Assistant Secretaries.

the pesticide responsibilities of the Food and Drug Administration and the research of the National Toxicology Program.

_43._ Id. § 201.
_44._ Id. § 201(b). The Under Secretary serves as Secretary if the Secretary is disabled, absent, or the office is vacant. The Deputy Secretary's primary responsibility is to administer the functions transferred to the Department from NOAA, as well as any other additional functions the Secretary gives to the Deputy Secretary. Id. § 201 analysis at 2-3. Moreover, the Act seems to favor political appointees over civil service employees.

Nothing in this Act is intended to discourage the appointment of career employees as Regional Administrators. However, the importance of the functions performed by the Regional Administrators and their need to be sensitive to local as well as national views leads to the conclusion that they should be appointed by the President with Senate confirmation.

_45._ Id. § 201 analysis at 3.
_46._ Id. § 201(b)(3)(B).
_47._ Id. § 201 analysis at 3. The commentary states:
  The planning function is combined with budgeting to assure that agency-wide planning will be both realistic and enforceable. The creation of an Assistant Secretary for International Relations is not meant to impinge in any way on the functions and responsibilities of the Department of State—on the contrary it should provide better coordination between the two departments.

_48._ See id. § 203. (broadly outlining the Secretary's powers). The relevant provisions of the potent administrative powers granted to the Secretary are as follows:

(a) Except as otherwise expressly prohibited by law, or otherwise provided in this Act, the Secretary may delegate any of his or her functions to such officers and employees of the Department as he or she may designate and may authorize such successive redelegations of such functions within the Department as he or she may deem to be necessary or appropriate.
As a pragmatically instrumental feature of the Conservation Foundation's proposed legislation, the Secretary would be expected to make specific annual reports "to the President for submission to the Congress" on programmatic activities of the Department. These reports must include a statement of the Secretary's goals, priorities, and plans for the Department, together with an assessment of the progress made toward the attainment of those goals, the effective and efficient management of the Department, and progress made in coordination of its functions with other departments and agencies of the Federal Government.

(b) The Secretary is authorized to establish, alter, consolidate or discontinue such organizational units or components within the Department as he or she may deem to be necessary or appropriate.

c) The Secretary is authorized to prescribe such procedural and administrative roles and regulations as he or she may deem necessary or appropriate to administer and manage the functions now or hereafter vested in him or her.

d) The Secretary is authorized to establish, alter, consolidate, maintain, or discontinue such State, regional, district, local or other field offices as he or she may deem to be necessary to carry out functions vested in him or her.

Id. § 203.

49. See generally R. SUMMERS, INSTRUMENTALISM AND AMERICAN LEGAL THEORY (1982) (examining the legal theory of "pragmatic instrumentalism," which emphasizes the pragmatic over the formalistic).

50. ENVIRONMENTAL PROTECTION ACT § 203(i) (Conservation Foundation, 2d Draft 1988). These reports would be "based whenever possible on the measures developed in accordance with section 503" of the Act. Id. Section 503 mandates the Secretary to, within eighteen months of the passage of the Act, "develop, for each major program administered by the Department (other than research programs), a measure or measures to evaluate the extent to which the program is accomplishing the purposes for which it was intended." Id. § 503(a). These measures must, "to the extent possible," be:

1. based on quantitative measures or changes in environmental quality;
2. based on data that are regularly collected over time so that the data for different time periods are comparable;
3. corrected for such factors as meteorological and economic conditions that are beyond the Department's control, so that the measures are indicative of the effects of the Department's program;
4. corrected for, or adequately reflective of, the effect of a program on other Department programs.

Id. § 503(b).

51. Id. § 203(i). The Act also provides guidance to the Secretary along functional lines in developing the specific content of the various programmatic reports required by § 203(i). See id. Each annual programmatic report must also include the following:

1. a summary of research and development efforts funded by the Federal Government to develop new technologies to control, minimize, or reduce environmental contamination;
2. a summary of all new regulatory programs and significant regulatory, enforcement, and remedial actions taken during the previous year;
3. a description of how the programs and actions initiated in the previous year compares with the future plans reported by the Department in previous annual reports to the Congress;
4. a summary of the plans for regulatory programs, and significant regulatory, enforcement, and remedial actions planned for the subsequent year;
The logic of the Act's integrated reporting provision is that it minimizes the number of reports the Department must make, in sharp contrast to the plenteous reports that currently overwhelm the EPA. The importance of each required report is thereby increased.

The organizational structure of the Act places function over environmental media. Title V addresses "information and monitoring." Title VI focuses on "research and training." Title VII guides "federal review of new substances." Titles VIII and IX unify the related roles of standard setting and

(5) a description of progress being made by the Department in cleaning up previous environmental damage and controlling present and future damage to the environment;

(6) a description of any environmental damage which the Department has no program to control, or which the Secretary believes may not be sufficiently controlled by present programs administered by the Secretary;

(7) a summary of efforts required under subsection 503(d) [instructing the Secretary to "maintain continuing efforts to improve the quality, reliability, and informativeness of environmental management measures].

Id.

52. Id. § 203 analysis at 5; see also NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, supra note 15, at 5 ("Agency officials appear before Congress as often as 90 times a year to deliver similar reports.").


54. Section 501(a) of the Act requires the Department to pursue three broad functions: (1) to assure the collection, the analysis, and dissemination of "relevant and accurate" environmental information; (2) to inform the public about changes in the environment; and (3) to "develop, collect and analyze on a regular basis quantitative measures of the degree of success" of governmental environmental programs. Id. § 501(a).

Specific sections within Title V include general provisions, id. § 501, monitoring systems, id. § 502, program evaluation, id. § 503, data disclosure requirements, id. § 504, mass balance information, id. § 505, accident response information, id. § 506, information on substances, id. § 507, and the bureau of environmental statistics, id. § 508.

55. Section 601(a) of the Act "makes clear that research should be conducted on potential as well as current problems." Id. § 601 analysis at 18. Moreover, § 601(b) consolidates a variety of diverse research programs.

Currently each EPA program has a somewhat different set of research authorities. There is no rationale for the differences, and many intricate and ingenious arrangements are constructed to get around the lack of authority created by historical accident. This section would make the full range of authorities available to all DEP programs.

Id.

Specific sections within Title VI include general provisions, id. § 601, training, id. § 602, science advisory board, id. § 603, and regulations for monitoring, analysis, and testing, id. § 604.

56. Title VII "establishes three categories of substances, with different data requirements and a different burden of proof to commence manufacture for each category." Id. § 702 analysis at 21. Under § 702, the Secretary is mandated "to establish, by order, three classes of substances—A, B, and C—and designate which categories of chemicals belong to which classes." Id. § 702 analysis at 22. The purpose of this tripartite designation "is to establish the data that have to be submitted with the notification (required by section 701) and the burden of proof before manufacturing or processing can begin." Id.

Classes of substances under Title VII include the following:

Class C substances, to which the most stringent requirements are attached, include:
permitting, respectively. Title X delineates “enforcement and liability.” Title XI structures emergency planning, accident prevention, and remedial action. Title XV provides integrated “citizen action and public participation” standards for all environmental media. Title XVI handles “international co-

1) all new pesticides; 2) all new fuel additives, as such additives are defined in the Clean Air Act; and 3) any other substances or categories of substances that the Secretary determines, by order, may cause an unreasonable risk.

Class B substances are substances manufactured or processed for a significant new use or new substances (other than Class C substances) for which there is not enough information to make a reasoned evaluation of the degree of risk posed by the substance.

Class A substances are all new substances not classified as class B or C substances.

Id.

Specific sections within Title VII include notification, id. § 701, classification, id. § 702, data requirements, id. § 703, general requirements, id. § 704, exemptions, id. § 705, and household appliances and building materials, id. § 706.

57. As the Conservation Foundation analysis explains:

In general, the Act divides all pollution into four categories: substances and products, point sources, mobile sources, and nonpoint sources. The first of these categories [is] covered in Title VII. Standards for the other three are covered in [Title VIII]. The standards in [Title VIII] for point and nonpoint sources are implemented primarily through a permit system contained in Title IX.

Id. analysis at 27; see infra notes 112-85 and accompanying text (explaining the unified permit system).

Specific sections within Title VIII include general standards, id. § 801, point sources, id. § 802, mobile sources, id. § 803, nonpoint sources, id. § 804, persistent or high risk substances, id. § 805, radiation, id. § 806, drinking water, id. § 807, environmental quality standards, id. § 808, and pollution generation reduction, id. § 809.

Section 901 is the integrated permitting section of the Act.

It differs from existing law in several important respects. While existing law allows discharge of any pollutants except if a permit is required, this Act makes it illegal to discharge any pollutants without a permit unless the pollutants or source have been explicitly exempted. Mobile sources and discharges of radioactive pollutants are exempted from this requirement.

Id. § 901 analysis at 40.

Specific sections within Title IX include applicability and conditions, id. § 901, federal review and issuance of permits, id. § 902, and management of discharges, id. § 903.

58. “The first nine sections of [Title X] consolidate the various enforcement authorities contained in the existing pollution control statutes. . . . The last section of [Title X] deals with liability.” Id., analysis at 44.

Specific sections within title X include unlawful acts, id. § 1001, records and reports/inspections and subpoenas, id. § 1002, compliance orders, id. § 1003, seizure, condemnation, and stop sale, id. § 1004, administrative procedure and judicial review, id. § 1005, administrative civil penalties, id. § 1006, civil penalties, id. § 1007, criminal penalties, id. § 1008, emergency orders and injunctive actions, id. § 1009, and liability, id. § 1010.

59. Specific sections within title XI include emergency planning, id. § 1101, imminent risks, id. § 1102, prevention of accidents, id. § 1103, reporting requirements and national contingency plan, id. § 1104, and remedial action, id. § 1105.

60. Specific overarching sections within title XV include public participation, id. § 1501, citizen suits, id. § 1502, reparations for environmental damage, id. § 1503, permits and remedial actions, id. § 1504, and grants for public participation id. § 1505.
operation" measures. Title XVIII deals with uniform multimedia "construction and remedial assistance" programs. As an omnibus feature of the Conservation Foundation's statutory proposal, Title XVII mandates "integrated management assistance." This approach is a radical departure from the single-media approach of the current system.

3. Bureau of Environmental Statistics

Creation of an environmental equivalent of the Bureau of Labor Statistics ("BLS") was first conceived by Paul Portney of Resources for the Future. Section 508 of the Act, which creates the Bureau of Environmental Statistics, attempts to give practical form to Portney's idea. As with the BLS, the Bureau of Environmental Statistics retains some independence from the DEP. In order to ensure this, its director is appointed by the President for a six-year term, is subject to senatorial confirmation, and can be removed only for cause.

The Environmental Protection Act suggests four important functions of the Bureau of Environmental Statistics—with obvious implications for an inte-
grated, reorganized federal regulatory approach to pressing environmental
problems. The first function is "identifying a comprehensive set of environ-
mental quality measures so that the Congress and the public can be informed
about conditions and trends on environmental quality." These measures
would include information about resources, the urban environment, as well as
air, land, and water quality. Second, the Bureau is instructed to prepare
guidelines for collecting the data that would be required for the environmental
quality measures mandated by Congress. Third, the Bureau will be responsible
for "collecting, storing, and making readily accessible the data required
for" the environmental quality measures mandated by Congress. In this re-
gard, the Conservation Foundation does not intend that the Bureau duplicate
collection efforts of other agencies where such collection is in accordance with
the guidelines. Nor does the Foundation intend the Bureau to be the exclusive
data collection agency.

Finally, the Act transfers responsibilities for prepar-
ing the President's annual report on environmental quality, as required by
NEPA, from the CEQ to the Bureau of Environmental Statistics. The ra-
tionale for this transfer of authority is that "the [CEQ] has been so weakened
that it is not capable of adequately implementing these functions." Lack of
funds, among other things, has made it difficult for the CEQ to operate effect-
ively. The Environmental Protection Act transfers these functions to the DEP
rather than trying to revive the CEQ.

4. Accountability of Federal Facilities

A vital feature of the Act is Title XII, which deals with federal facilities
and resources. This section has the potential for regulating and controlling a
relatively unaccountable area of current environmental law. As stated so suc-
cinctly by the Conservation Foundation: "Title XII has two aims. The first is to deal with pollution from federal facilities, a major and shameful problem. The second is to protect valuable federal resources, such as national parks and wilderness areas." 

The major premise of Title XII is articulated in section 1201(a): "Each department, agency, or instrumentality . . . of the Federal Government . . . and each officer, agent, or employee thereof . . . shall . . . comply with all [laws] respecting the control and abatement of pollution . . . to the same extent as any nongovernmental entity including the payment of reasonable service charges and penalties." The language of section 1201(a) is identical to section 118 of the Clean Air Act, except that the new provision applies to all forms of pollution that may emanate from federal facilities.

Title XII contains several provisions to effectuate federal facilities accountability. Section 1202 establishes a "Federal Compliance Revolving Fund" designed to lend money to federal agencies to control pollution or to restore or rehabilitate natural resources injured by pollution in certain instances. Section 1203 of the Act creates a system by which the DEP can track compliance by the federal facilities. The Secretary is required to "establish a special Federal Agency Pollution Control Compliance Docket." This docket must "contain the information submitted to the Secretary by each department, agency, or instrumentality of the United States regarding any Federal Facility not complying with any requirement" of the Environmental Protection Act. To encourage compliance yet further, section 1203 requires the Secretary to report annually in the Federal Register a list of noncomplying federal facilities. Section 1203 also includes a public information program "to focus

75. Id. at 55.
76. Id. § 1201(a).
78. ENVIRONMENTAL PROTECTION ACT, analysis at 55 (Conservation Foundation, 2d Draft 1988).
79. Id. § 1202(a).
80. Id. § 1202 analysis at 55. One or the other of two conditions are set forth in § 1202 for federal agency borrowing from the fund: (a) the agency requested money from the Office of Management and Budget and/or Congress for pollution control and funds were denied; or (b) a pollution problem was not foreseen at the time of the last budget process. An agency which receives money from the fund must request an appropriation the following fiscal year for money to repay the fund.
81. Id. § 1203(a)(1).
82. Id.
83. Id. § 1203(a)(3).
84. Id. § 1203(a)(4). The federal compliance docket must be available for public inspection. Id. §1203(a)(2).
additional attention on federal facilities which are in violation of the law."\(^8\)

**B. Streamlined Pollution Control Standards Focusing on "Unreasonable Risks"**

Perhaps the heart of the Conservation Foundation’s unified legislative scheme is section 801(a) of the Act which states with deceptive simplicity: “Unless otherwise specified in this Act, the criterion for action . . . shall be prevention of unreasonable risk.”\(^9\) This is the same standard contained in the Toxic Substance Control Act (“TSCA")\(^7\) and portions of other legislation.\(^8\) However, the proposed Act, unlike TSCA, tries to define the term. This definitional provision is perhaps one of the most important sections of the Act.

1. **Six-Factor Risk Test**

Section 801(b)(1) provides six nonexclusive factors that the DEP must consider in determining whether an unreasonable risk may exist which justifies a particular policy. Specifically, the Secretary is admonished to “weigh both the costs and benefits to society of the action under consideration, including, but not limited to” the six factors set forth in section 801(b)(1).\(^9\)

The first risk consideration ensconced in the Act entails “[t]he long-term and short-term actual and potential risks to man and the environment, including risks to both individuals and populations; and including the cumulative effects of multiple sources or types of risk.”\(^9\) For example, a cumulative effect of multiple sources of the same pollutant would be individual exposure to lead from air particulates and from drinking water.\(^9\) An example of the cumula-

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85. Id., analysis at 56.
86. Id. § 801(a); see also id. § 801 analysis at 27 (“The general standard underlying almost all authorities contained in the Act is prevention of unreasonable risk.”)
87. 15 U.S.C. §§ 2603(f), 2606(b)(1) (1988). Section 2603(f) of TSCA mandates that the Administrator determine whether a chemical substance presents an unreasonable risk of “serious or widespread harm to human beings from cancer, gene mutations or birth defects.” Id. § 2603(f). If a substance is found to present an unreasonable risk, the Administrator must take action. One form of action is contained in § 2606(b)(1), which empowers a district court to grant temporary or permanent relief, as necessary, to protect health or the environment from unreasonable risk associated with the substance. Id. § 2606(b)(1); see also 15 U.S.C. § 2627(a) (1988) (empowering the Administrator to grant states money to establish and operate programs to prevent or eliminate unreasonable risk to health or environment from substances that the Administrator is unable or unlikely to take action to eliminate or prevent).
89. ENVIRONMENTAL PROTECTION ACT § 801(b)(1) (Conservation Foundation, 2d Draft 1988).
90. Id. § 801(b)(1)(A).
91. Id. § 801 analysis at 27.
The second risk factor in the Conservation Foundation's proposal concerns "[t]he economic costs to society and to particular communities, and the distribution of such costs." Thus DEP should evaluate "both the costs of the damage caused by pollution and the costs of preventing or remedying the situation." According to the Conservation Foundation, use of this factor would improve environmental policymaking because consideration of such preventative and remedial costs are not explicitly required by present environmental laws, even though these types of costs are often "covertly and secretly" weighed in the balance.

Third, the Act mandates review of the effects of government action "on technological innovation." Unfortunately, no commentary accompanies this open-ended provision. Without further elaboration, application of this risk factor would result in unpredictable and undesirable outcomes because virtually all governmental regulations that require business expenditures have an arguable impact on "technological innovation."

A fourth risk factor set forth in section 801(b) requires the DEP to consider "[t]he existence of substitute products or methods, and the costs and benefits to society of employing such substitutes." The rationale for requiring government consideration of this factor is sensible. As noted by the Conservation Foundation:

The existence of substitutes generally reduces the costs and impact of a regulatory action. But the risks created by use of the substitutes must also be considered because there are cases where regulatory action may actually have increased risk by encouraging the use of substitute products or methods with greater risks than the products they replaced.

The fifth and sixth factors expressly mentioned in the Act, "[t]he implementability of the proposed action" and "[t]he effects of the proposed action

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92. Id.
93. Id. § 801(b)(1)(B).
94. Id. § 801 analysis at 28.
95. Id. The Conservation Foundation analysis states:
[Preventative and remedial costs of environmental regulation] are now, in theory, excluded from some standard-setting decisions, notably the primary air quality standards under [the Clean Air Act]. [The Environmental Protection Act] explicitly includes such costs because even with respect to primary air quality standards these costs are always considered and influence the decision. Thus the question is not whether the costs of standards should be considered but whether they should be considered openly and explicitly or covertly and secretly.

Id.
96. Id. § 801(b)(1)(C).
97. Id. § 801(b)(1)(D).
98. Id. § 801 analysis at 28.
99. Id. § 801(b)(1)(E).
on other nations' are cryptic and unbounded. The only commentary regarding the “implementability” factor is a tautological observation that “[t]his must be considered because the actual reduction in risk is a product of the stringency of the standard and the degree to which it is implemented.” Similarly, no guidance is provided by the Conservation Foundation on how the Secretary is supposed to analyze the international implications of a potential government policy. Presumably, general principles of international law and emerging principles of global environmental stewardship would be relevant and appropriate factors from which to borrow in interpreting this factor.

These six factors comprise the first attempt to codify a statutory definition of unreasonable risk. While the Conservation Foundation has provided guidance regarding several of the factors, it has failed to guide the DEP regarding other equally important factors.

2. Qualitative Emphasis

Although the Act expressly mandates in section 801(b)(2) that the Secretary evaluate both the costs and benefits of a proposed action, the Act does not “require or even encourage quantitative cost-benefit analysis as a method for making regulatory decisions.” Rather, the Act explicitly refers to the need for the Secretary to “exercis[e] . . . judgment . . . [in] decid[ing] whether an action . . . should be taken”; indeed, judgment is inherently qualitative in nature and “in most cases most of the costs and benefits cannot be quantified with any precision.”

100. Id. § 801(b)(1)(F).
101. Id. § 801 analysis at 28.
102. See, e.g., WORLD COMMISSION ON ENVIRONMENT & DEVELOPMENT, OUR COMMON FUTURE 348-51 (1987) (setting forth proposed principles of international environmental law including “inter-generational equity,” “conservation and sustainable use,” “prior notification, access, and due process,” “sustainable development and assistance,” “general obligation to co-operate on transboundary environmental problems,” and “exchange of information”); Note, The Valdez Principles: A Corporate Self-Governance Code on Environmental Conduct, 2 GEO. INT'L ENVTL. L. REV. 237, 239 (1989) (quoting the Valdez Principles, which include: “protection of the biosphere,” “sustainable use of natural resources,” “reduction and disposal of waste,” “wise use of energy,” “risk reduction,” “marketing of safe products and services,” “damage compensation,” and “disclosure”); see also Blomquist, supra note 64, at 40-48 (discussing the potential impact of WORLD COMMISSION ON ENVIRONMENT & DEVELOPMENT); Note, supra, passim (examining the strengths and weaknesses of the Valdez Principles, a set of ten corporate management guidelines, which were created by the Coalition for Environmentally Responsible Economies (“CERES”) in the aftermath of the Exxon Valdez spill in 1989).
103. ENVIRONMENTAL PROTECTION ACT § 801 analysis at 29 (Conservation Foundation, 2d Draft 1988).
104. Id. § 801(b)(2). The statute provides: “Nothing in this section shall be construed as requiring the Secretary to perform quantitative cost-benefit analysis. In exercising the judgment necessary to decide whether an action under this Act should be taken the Secretary shall give the greatest weight to the benefits of the proposed action.” Id.
105. Id. § 801 analysis at 29. “Even in those rare cases where they can be quantified, cost-benefit analysis does not encompass certain dimensions which the Act requires the Secretary to consider, such as the distribution of the costs of proposed actions.” Id.
Section 801(c) of the Act also emphasizes qualitative decisionmaking over quantitative analysis. This section provides that “[t]he amount and type of analysis conducted for a particular decision should be in proportion to the importance of the decision, as determined at the discretion of the Secretary.”

While this provision “is intended to prevent judicial decisions invalidating DEP decisions because of insufficient analysis, as long as the basic requirements of [the] Act and other required administrative procedures are met,” the Secretary could not consider it to be a blank check. By implication, the judiciary would be authorized to invalidate DEP decisionmaking that constituted an abuse of discretion. Such abuse could occur where the agency failed to exercise discretion in deciding upon the amount and type of analysis appropriate under the circumstances.

3. **Err on the Side of Benefits**

An important decisionmaking standard built into the Act is the admonition that “[i]n exercising the judgment necessary to decide whether an action . . . should be taken the Secretary shall give greatest weight to the benefits of the proposed action.”

It is interesting, however, that with the exception of part of one of the six risk factors delineated under section 801(b)(1), no explicit statutory guidance is provided for examining the benefits of a potential regulatory action.

The meaning of the presumption built into this section is “that if the facts of a particular case are insufficient to decide a particular action the Secretary should err on the side of protecting against risk.” This standard “does not mean that the Secretary should operate on the basis of worst-case scenarios or should in any way distort the probabilities of particular risks or actions.”

Rather, in all but the most factually incomplete cases, the Secretary will operate under the presumption to err on the beneficial side.

### C. Unified Permitting

The Environmental Protection Act radically departs from the prevailing system of media-specific pollution control regulation. Instead, the Act focuses
on sources of pollution that may end up in an assortment of environmental media such as air, water, and land. Title VIII divides sources of pollution into four categories: point sources, mobile sources, nonpoint sources, and substances. Miscellaneous pollution problems are addressed elsewhere in Title VIII.

1. Point Sources

Point sources of pollution must essentially comply with "best technology to prevent unreasonable risk." In determining the aforementioned technology for specific sources, section 802 of the Act directs the Secretary to promulgate regulations predicated on three basic considerations: (1) the best available technology for the source, (2) the environmental impacts of utilizing the technology, and (3) the efficiencies that could be attained regarding "all forms of pollution discharged by the source."

In a provision similar to subsection 405(d)(3) of the Clean Water Act, subsection 802(a)(3) of the Act empowers the DEP to issue "a design, equipment, management practice, or operational standard, or combination of these."


Environmental Protection Act § 802 analysis at 30 (Conservation Foundation, 2d Draft 1988). Section 802 of the Act provides:

The Secretary shall issue regulations providing guidelines setting forth what constitutes prevention of unreasonable risk for classes or categories of existing point sources, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants. The amounts and characteristics may be expressed as total amounts from the source or as amounts or concentrations discharged into particular pathways, or as any combination of these.

Id. § 802(a)(1).

Section 808 mandates: "[E]ach state shall establish environmental quality standards . . . to protect the quality of the air, surface water, groundwater, estuaries, drinking water, wetlands, national parks and other environmentally sensitive areas within its boundaries." Id. § 808(a)(1).

114. Id. § 802(a)(2)(A). This section provides:

The physical measures and practices (including raw material, product, and process changes) that have proven effective when applied to at least one source which is the same or similar to the source covered by the regulation or that have proven effective in laboratory or pilot plant tests which in the opinion of the Secretary adequately simulate the operating conditions of the relevant point source . . . .

Id.

115. Id. § 802(a)(2)(B) ("the long-term and short-term environmental impacts of applying the technology").

116. Id. § 802(a)(2)(C). According to the analysis which accompanies the Conservation Foundation proposal, "[T]his factor is included because it is known that in some cases (coal-fired steam electric power generating plants, for example) pollution control can be made both more efficient and more effective if the trade-offs among different pollution controls are considered." Id. § 802 analysis at 30.

thereof." if the Secretary determines that a subsection 802(a)(1) numerical standard is not feasible.\textsuperscript{119}

The Act also accounts for new point sources. Under section 802(b)(1), the DEP is directed to issue discharge limitations for various categories of major new point sources under section 902.\textsuperscript{119} Pursuant to subsection 802(b)(2), the new source discharge standards must be at least as stringent as existing source limitations.\textsuperscript{119} Moreover, subsection 802(b)(3) directs the Secretary to utilize the same three factors delineated in the Act for existing point sources.\textsuperscript{119}

In a remarkable innovation that would go far in addressing current industry disincentives "for construction of new facilities . . . . discharge limitations for new sources are significantly more stringent than the limitations for existing sources,"\textsuperscript{119} subsection 802(b)(4) allows the Secretary to "make the new point source limitations applicable to existing sources"\textsuperscript{119} under certain circumstances, expansively described in the proposed statute.\textsuperscript{119}

Subsection 802(b)(4) is probably beyond constitutional attack as a taking because the provision arguably advances the public interest while leaving the essential commercial value of production facilities untouched, even if it might impact investment-backed expectancies.\textsuperscript{119} Nonetheless, it is reasonable to expect considerable litigation disputing the meaning of its broadly textured

\begin{footnotes}
\footnotetext{118}{\textsc{environmental protection act} § 802(a)(3) (conservation foundation, 2d draft 1988).}
\footnotetext{119}{ld. § 802(a)(1). for the relevant language of § 802(a)(1), see supra note 113.}
\footnotetext{120}{ld. § 802(b)(1); see also id. § 902 (describing the requirements for federal review and issuance of permits for major sources). section 902(a) provides:

\begin{quote}
the secretary shall issue guidelines delineating those permit applications . . . which should be reviewed by the secretary. the guidelines should, at a minimum, require federal review of permit applications covering major actual or potential discharge sources and all actual or potential discharge sources that would discharge into the waters of the territorial seas, the contiguous zone, or the oceans.
\end{quote}

\textit{ld.}

\footnotetext{121}{ld. § 802(b)(2). the subsection provides: "the allowable discharge limitations will be at least as stringent as the limitations [for existing sources] and should be set at such a level as to encourage the development of technology, processes, and practices that will eliminate pollution discharge." \textit{ld.}}

\footnotetext{122}{ld. § 802(b)(3); see supra notes 114-16 and accompanying text (discussing the factors to be considered in determining regulations for existing point sources).}

\footnotetext{123}{\textsc{environmental protection act} § 802 analysis at 31 (conservation foundation, 2d draft 1988).}

\footnotetext{124}{ld.}

\footnotetext{125}{ld. § 802(b)(4). the pertinent language of subsection 802(b)(4) states: "if the secretary determines that any regulation [dealing with existing point sources] is significantly deterring progress in protecting against unreasonable risk by deferring construction of new facilities the secretary may issue a rule making such regulation applicable to existing facilities." this subsection goes on to provide: "in promulgating a rule under this subsection the secretary shall set forth the date on which the rule will take effect, allowing adequate time for implementation of the rule. in promulgating a rule under this subsection the secretary shall consider the factors specified in subsection 802(a)(2) [for existing sources]." \textit{ld.}}

\footnotetext{126}{see generally \textsc{l. tribe, american constitutional law} 595-99 (2d ed. 1988) (discussing regulatory takings jurisprudence).}
\end{footnotes}
language.

2. Mobile Sources

Section 803 of the Act, which deals with mobile sources, is predicated on the mobile source provisions of the Clean Air Act.\textsuperscript{127} The Conservation Foundation's legislative proposal ameliorates this body of law by being "applicable to the discharge of any pollution or noise from any class or classes of new motor vehicles or new motor vehicle engines to prevent unreasonable risk."\textsuperscript{128} Thus, while motor vehicles, motor vessels, and aircraft are subjected to a regulatory program similar to existing law, a significant difference from the existing mobile source Clean Air Act standards is the inclusion of noise as an aspect of pollution subject to regulation.\textsuperscript{129}

Subsection 803(a)(2)(C) mandates that mobile source standards "be no less stringent than those established under [the Clean Air Act] unless there is new scientific information that modifies the information on which" the Clean Air Act standard was based.\textsuperscript{130} Moreover, other provisions of subsection 803(a)\textsuperscript{131} instruct the Secretary, in setting mobile source standards under the Act, to "give[e] appropriate consideration to the costs and benefits of compliance within" a particular time period\textsuperscript{132} and to "take account of the effect of the standards on vehicle safety and fuel efficiency."\textsuperscript{133} These mobile source standards would "be applicable to vehicles and engines for their useful life, whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution or noise."\textsuperscript{134}

Subsection 803(b) of the Act incorporates by reference Clean Air Act sections 206\textsuperscript{135} and 207\textsuperscript{136} with certain technical conforming changes. The incorporated Clean Air Act sections "deal with testing, inspection, and certification of motor vehicles to ensure that they meet the emissions standards established under the Act."\textsuperscript{137} A related provision, section 803(c), addresses assorted pro-

\begin{itemize}
\item \textsuperscript{128} \textit{ENVIRONMENTAL PROTECTION ACT} § 803(a)(1) (Conservation Foundation, 2d Draft 1988).
\item \textsuperscript{129} \textit{Id.} § 803 analysis at 31.
\item \textsuperscript{130} \textit{Id.} § 803 analysis at 31-32.
\item \textsuperscript{131} Section 803(a) "is based in general terms" on section 202 of the Clean Air Act, 42 U.S.C. § 7521 (1988). \textit{ENVIRONMENTAL PROTECTION ACT} § 803 analysis at 31 (Conservation Foundation, 2d Draft 1988).
\item \textsuperscript{132} \textit{Id.} § 803(a)(2)(A).
\item \textsuperscript{133} \textit{Id.} § 803(a)(2)(B).
\item \textsuperscript{134} \textit{Id.} § 803(a)(2)(D).
\item \textsuperscript{137} \textit{ENVIRONMENTAL PROTECTION ACT} § 803 analysis at 32 (Conservation Foundation, 2d Draft 1988).
\end{itemize}
hibited acts (including sale of a vehicle or engine without an environmental certificate of conformity and tampering with a pollution control device) and is a modified version of section 203(a) of the Clean Air Act. Section 803(e) of the Act focuses on standards for limiting pollution from vessels. Section 803(f) provides a statutory framework for regulating aircraft noise and pollution.

Importantly, section 803(d) of the proposed Act—addressing exemptions from the general mobile source standards—is a creative expansion of a concept contained in section 206(g) of the Clean Air Act. Specifically, the Clean Air Act allows the manufacturer of heavy-duty engines or vehicles to pay a nonconformance penalty instead of meeting applicable emission standards. Subsection 803(d)(2) of the Act amplifies the concept to allow the DEP to assess a nonconformance penalty on a manufacturer of any type of vehicle engine or motor vehicle who cannot comply with the standard. The pertinent penalty should be crafted by the Secretary “to provide an incentive to the manufacturer to meet the requirements in the future” as well as to “remove any competitive disadvantage to manufacturers whose engines or vehicles achieve the requirement.”

The Conservation Foundation hopes “that this provision will give the Secretary a realistic option to delaying imposition of standards” other than “[t]he major option under the existing [Clean Air Act] [which] forbid[s] production of entire lines of motor vehicles, an option that has proved to be unrealistic.”

3. Nonpoint Sources

Section 804 of the Act, dealing with nonpoint sources, is similar to the Clean Water Act. Under current procedure, each state submits a management program for dealing with nonpoint pollution problems, which is then reviewed and approved by the EPA.

However, section 804 incorporates a number of significant changes from existing law. First, the “management programs must cover all forms of nonpoint pollution, not just water pollution.” Second, management programs may en-

139. ENVIRONMENTAL PROTECTION ACT § 803(e) (Conservation Foundation, 2d Draft 1988).
140. Id. § 803(f).
141. Id. § 803(d).
143. ENVIRONMENTAL PROTECTION ACT § 803(d) (Conservation Foundation, 2d Draft 1988).
144. Id. § 803(d)(2)(A)-(B).
145. Id. § 803 analysis at 32-33.
146. See id. § 804 analysis at 33.
149. Id.
compass a panoply of features “including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, land use control, education, training, technology transfer, and demonstration projects”\textsuperscript{150} to achieve “best management practices”\textsuperscript{151} for various nonpoint sources. Third, the Act requires states to develop “[p]olicies and procedures to ensure that the total acreage of fresh and salt water wetlands within the boundaries of the State will not be diminished.”\textsuperscript{152} Fourth, in an attempt to prevent backlogs that currently stall state implementation plans under the Clean Water Act,\textsuperscript{153} section 804(d) of the Conservation Foundation proposal provides a six-month automatic approval time frame for the Secretary to act on a proposed state program or to notify a state of required plan modifications.\textsuperscript{154} Fifth, in order to regulate cross-border pollution,\textsuperscript{155} the Act mandates that state management programs for nonpoint sources “contain programs adequate to prevent violation of the standards of this Act in another State because of nonpoint source pollution in the State submitting the program.”\textsuperscript{156} Sixth, consistent with other provisions of the Act that vigorously incorporate economic measures into environmental policy,\textsuperscript{157} section 804(f) allows the DEP to “include withholding of waste treatment and management assistance grant funds”\textsuperscript{158} if the “Secretary disapproves a State program.”\textsuperscript{159} Finally, drawing upon an analogous provision under the Clean Air Act, which allows the EPA to impose a Federal Implementation Plan (“FIP”), section 804(g) of the Act allows the DEP Secretary to “promulgate and/or implement all or part of a [generic nonpoint pollution source] program for the State”\textsuperscript{160} if “the Secretary finds that there is continuing failure of a State to submit an adequate program.”\textsuperscript{161}

\begin{itemize}
  \item \textsuperscript{150} Id. § 804(a)(2)(C).
  \item \textsuperscript{151} Id.
  \item \textsuperscript{152} Id. § 804(a)(2)(I). “This goal was agreed to on a national basis by the Conservation Foundation’s National Wetlands Forum.” Id. § 804 analysis at 33-34.
  \item \textsuperscript{153} Id. § 804 analysis at 34.
  \item \textsuperscript{154} Id.; see id. § 804(d).
  \item \textsuperscript{155} See generally P. Muldoon, Cross-Border Litigation: Environmental Rights in the Great Lakes Ecosystem (1986) (recommending the adoption of an “Ecosystem Rights Act” that would guarantee all citizens of the Great Lakes Ecosystem basic environmental rights including the ability to participate in environmental legal proceedings across state, provincial, and international borders).
  \item \textsuperscript{156} Environmental Protection Act § 804(e)(1) (Conservation Foundation, 2d Draft 1988). Moreover, “[a] State may petition the Secretary at any time to take action under subsection (e)(1).” Id. § 804(e)(2).
  \item \textsuperscript{157} See supra notes 123-126, 142-145 and accompanying text.
  \item \textsuperscript{158} Environmental Protection Act § 804 analysis at 34 (Conservation Foundation, 2d Draft 1988).
  \item \textsuperscript{159} Id. § 804(f).
  \item \textsuperscript{160} Id. § 804(g).
  \item \textsuperscript{161} Id.
\end{itemize}
4. **Substances**

Section 805 of the Act—addressing "persistent or high-risk substances"—is unique. "While sections 802, 803, and 804 deal with standards for types of sources of pollution, section 805 deals with individual pollutants." According to the Conservation Foundation:

> The section is necessary to provide general ambient standards for pollutants likely to pose unreasonable risks (analogous to the national ambient air quality standards), to eliminate or place limits on pollutants which persist in the environment and whose effect may therefore be cumulative (such as metals, DDT, and PCBs), and to activate or govern certain other parts [of the integrated environmental proposal].

Sections 805(a) and (b) work in tandem. Under the former provision, the Secretary must "establish and maintain a list" of substances that may either be environmentally persistent or may pose a severe risk if exposure occurs and to which there is a reasonable likelihood that humans or the environment will be exposed. Under the latter subsection, the Secretary is required to set quantitative limits for each of the listed substances. The limit—"based on the prevention of unreasonable risk"—can "be established on a national, regional, State, or local basis, and may be made applicable to particular types of facilities, processes, or sources. In lieu of or in addition to an overall limit, the Secretary may promulgate by rule an allowable concentration of a substance in a particular medium."

Section 805(d) is an override provision: In the case of conflict between regulations addressing new substances under section 704, point sources under section 802, mobile sources under section 803, nonpoint sources under section 804, or drinking water standards under section 807, "the more stringent standards shall prevail." This provision will eliminate some of the problems inherent in the current media-specific system.

The Act's unified permitting scheme is a bold step toward reforming the current system under which a given project may require numerous permits at the local, state, and federal levels. To complicate the permitting process further, these requirements are currently scattered among different pieces of environmental legislation.

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162. *Id.* § 805.
163. *Id.* § 805 analysis at 34.
164. *Id.* § 805 analysis at 34-35; see, e.g., *Id.* §§ 505(c), 901(b)(2)(B), 1104(b)(1) (addressing, respectively, toxic chemical release standards, chemical composition permitting requirements, and national contingency plan reporting requirements for other parts of the Act activated by § 805).
165. *Id.* § 805(a)(1). Moreover, new substances, *Id.* § 805(a)(2), and tobacco, *Id.* § 805(a)(4), may be included in the list promulgated under subsection 805(a)(1), "but the Secretary's authority to regulate the use of tobacco shall be limited to measures intended to prevent involuntary exposure to tobacco and its combustion products in public places." *Id.* § 805(a)(4).
166. *Id.* § 805(b)(1).
167. *Id.*
168. *Id.* § 805(d).
5. Miscellaneous Pollution Problems

Sections 806 and 807 of the Act address "pollution problems that, for different reasons, do not fit into the general regulatory framework of the Act." Section 806 focuses on radiation. It allows the DEP, under section 805, to "publish standards for levels of allowable radiation in the environment, except insofar as environmental standards are within the jurisdiction of other agencies." Thus, assuming continuation of the current jurisdictional framework, the Nuclear Regulatory Commission ("NRC") would continue to set technology standards and emission levels for nuclear facilities, while the DEP would assume the EPA's current responsibility for setting ambient radiation standards outside these facilities. In the case of conflict between DEP and the NRC, the Act provides for a dispute resolution process to be resolved by the President. Section 806(b) of the Act also provides the DEP with authority to set "standards for allowable levels of radon within buildings."

Another type of problem that does not fit comfortably within the Act's framework is drinking water. To resolve this dilemma, section 807 instructs the Secretary to develop drinking water standards under section 805 of the Act, with "standards . . . based on the prevention of unreasonable risk." The states will be primarily responsible for implementing the standards under the nonpoint source provisions of sections 804 and the permitting requirements of section 901.

Section 808 of the Act provides for environmental quality standards since "[e]nforcement of the standards for individual substances and for types of pollution sources may still not provide adequate protection for environmentally sensitive parts of the natural environment." Analogous to water quality standards under the Clean Water Act, section 808 of the Act allows each state to develop environmental quality standards subject to the overall supervision of the DEP. Of particular importance, state environmental quality standards must conform with the unreasonable risk standard of section 801 and the individual substance pollution limitations of section 805.

Section 809 encompasses a novel legal strategy aimed at reducing pollution generation. While "[t]he whole Environmental Protection Act promotes . . . a
preventative approach by looking at pollution problems and their sources" in a comprehensive fashion, "[s]ection 809 deals with waste reduction explicitly."181 Specifically, section 809(a) disallows an environmental permit of any kind unless "the applicant has examined available methods for reducing the total amount of pollution generated (including direct and indirect releases to air and water) and has or will utilize such methods to the maximum practical extent."182 Moreover, section 809(b) dictates that the Secretary "establish and maintain a data bank of pollution generation reduction methods [to be] disseminated in ways designed to maximize the use of the data by the public."183 Section 809(c) is an innovative concept that allows the Secretary to "require use of [a] less risky process as a condition of granting a permit" in the event that "there are two or more manufacturing processes serving the same function and costing approximately the same, but one process poses less risk than the other."184 Finally, section 809(d) directs the Secretary to "investigate the use of other incentives to encourage process changes that reduce the generation of pollutants, . . . encourage environmentally beneficial re-use and recycling of materials, and . . . foster the use of less harmful substances."185

III. Prospects and Problems Under the Environmental Protection Act

Reforming the long-standing regulatory practice of fragmenting environmental policy into separate media—water pollution problems, air pollution problems, and solid waste disposal problems—is a worthy national goal. The recent Conservation Foundation's Environmental Protection Act proposal is an auspicious beginning. But before Congress seeks to overhaul and codify the nation's environmental laws, it should pause to consider both the prospects and problems of a comprehensive and integrated pollution control code for the United States. The ends and means of environmental policy should be clarified, analyzed, and thoroughly reevaluated.

It is difficult, at best, to generalize about the inchoate, tentative, and still-evolving proposals proffered by the Conservation Foundation. However, the following critique of the Conservation Foundation's project may be useful in the ongoing debate about the future of environmental policy in America. The first section addresses the major benefits of the proposal, while the second section raises six important issues that remain unresolved by the proposed Act.

181. Id. § 809 analysis at 39.
182. Id. § 809(a).
183. Id. § 809(b).
184. Id. § 809 analysis at 39. The Conservation Foundation concedes that "the wording [of this provision] probably will require further refinement." Id.
185. Id. § 809(d).
A. Prospects

1. Emphasis on Pollution Prevention and Cross-Media Control

At first blush, the media-specific approach to pollution control appears to have succeeded in improving environmental quality at the local level.\textsuperscript{186} Despite these strides, this approach does not go far enough to foster pollution prevention. I have previously noted that “a major shortcoming of the media-specific control approach is the existence of cross-media pollution where one pollutant, while prevented from being introduced in a target medium such as surface water, for example, is allowed to be introduced in a nontarget medium such as ambient air.”\textsuperscript{187}

One of the chief virtues of the Conservation Foundation’s Environmental Protection Act, therefore, is its strong emphasis on pollution prevention.\textsuperscript{188} Pollution prevention seeks to track and reduce residuals throughout the environment, rather than focusing on simply removing pollutants from aqueous waste streams, for example, by control technologies such as biological secondary treatment or air stripping, or by managing gaseous by-products of industrial operations through scrubbers or tall stack add-ons. While a cross-media pollution prevention approach to environmental problems is more effective and desirable than single-media regulation, “[a] whole generation of engineers, lawyers, business executives, and government officials have become accustomed to pollution control by specific media.”\textsuperscript{189} Therefore, the Conservation Foundation proposal is also, in general, a potent social policy tool for reeducating and reorienting the vested single-media pollution control constituency in this country.\textsuperscript{190}

2. Emphasis on Technical Merits

While potential difficulties loom in implementing an “unreasonable risk standard,”\textsuperscript{189} the Environmental Protection Act’s strategic emphasis on sorting out serious environmental problems from de minimis environmental concerns, and inducing the most rational and appropriate policy responses to serious en-


\textsuperscript{187} Blomquist, Beyond the EPA and OTA Reports: Toward a Comprehensive Theory and Approach to Hazardous Waste Reduction in America, 18 EnvTL. L. 817, 888 (1988); see also OTA Report, supra note 29, at 4 (“Current pollution control methods often do little more than move waste around.”).

\textsuperscript{188} See supra notes 181-85 and accompanying text.

\textsuperscript{189} Blomquist, supra note 187, at 888; cf. OTA Report, supra note 29, at 16-17 (arguing that there are no technical constraints in the way of achieving the ideal of waste reduction, but that this route is not pursued due to “resource commitment to and familiarity with pollution control”).

\textsuperscript{190} See Blomquist, supra note 187, at 889.

\textsuperscript{191} See infra notes 275-85 and accompanying text.
environmental problems, is commendable. Indeed, the Conservation Foundation's proposed legislation implicitly endorses the concept of regulatory risk goals, explained by Daniel Byrd and Lester Lave as:

"[f]ocus[ing] regulation on the worst risks [while] ignor[ing] trivial, or de minimis ones. Specifically ... agencies [should] adopt the concepts of de minimis risks to guide their regulatory efforts. Adopting these concepts would simplify regulatory decision-making. Instead of agonizing about each new case, agencies would have clear guidance on a major portion of risks: They should neglect de minimis risks and generally act on significant ones. The sticky questions would then primarily be limited to those risks that fall in the middle—those risks that are greater than trivial but less than significant."

By focusing scarce regulatory resources on the most vexing environmental problems, federal environmental policy would, so far as is reasonably possible, be characterized by "fidelity to the technical merits"—a standard frequently violated by past American environmental regulation. "Technical merits" means "the feasibility, effectiveness, and efficiency of proposed remedies." In a larger sense, fidelity to the technical merits implies a presence of strategic coherence that avoids serious flaws in policymaking and a regulatory approach that makes it possible "for policy makers to determine, and be held accountable, for the degree of risk aversion society actually adopts in various situations." Section 801 of the Act attempts to structure federal environmental decision-making around the central objective of "prevention of unreasonable risk" by explicitly and strategically guiding agency assessment of six specific risk fac-

192. See supra notes 89-102 and accompanying text.
194. See M. LANDY, M. ROBERTS & S. THOMAS, THE ENVIRONMENTAL PROTECTION AGENCY: ASKING THE WRONG QUESTIONS 6 (1990) [hereinafter ASKING QUESTIONS]. The authors note that "[t]he history of environmental policy abounds with examples of the price to be paid for ignoring the technical merits. Repeatedly, policies have been adopted that were simply unworkable or whose announced goals could only be achieved at a higher cost than even avid proponents were prepared to pay." Id.; see also id. at 125 (regarding the failure of EPA to achieve fidelity to the technical merits in RCRA rulemaking); id. at 231-32 (regarding enforcement of the Clean Air Act); B. ACKERMAN, S. ROSE-ACKERMAN, J. SAWYER & D. HENDERSON, THE UNCERTAIN SEARCH FOR ENVIRONMENTAL QUALITY 17-30 (1974) (regarding water quality control); B. ACKERMAN & W. HASSLER, CLEAN COAL/DIRTY AIR 10-12 (1981) (regarding new source performance standards under the Clean Air Act); A. NICHOLS, TARGETING ECONOMIC INCENTIVES FOR ENVIRONMENTAL PROTECTION 127-58 (1978) (regarding benzene case study).
195. ASKING QUESTIONS, supra note 194, at 6. The authors explain: "[f]easibility means that the proposed solution can be put into place. Effectiveness means that the plan will produce the desired result. Efficiency means operating at minimum cost and conserving scarce public and private resources." Id.
196. See id. at 281.
197. Id.
tors. These factors—risks to man and the environment, economic costs to society and to particular communities, effects on technological innovation, existence of substitute products or methods, implementability of the proposed action, and international effects—while imperfect and subject to potential indeterminacy, nevertheless, go far to advance rational analysis within the limits of current scientific understanding. More importantly, the explicit language of section 801 enhances accountability for environmental officials, causing them to strive to exercise sound regulatory judgment instead of caving in to political pressures.

3. Emphasis on Governmental Capacity

The proposed reorganization of regulatory responsibilities away from mediaspecific bureaucracies and towards functionally related roles is a meritorious idea. This plan has the potential to foster institutional capacity within the DEP. As explained in a recent critique of the EPA:

The success of a republic depends on the capacities of its institutions as well as those of its citizens. A government capable of performing . . . must be more than a necessary evil. It must be an enterprise capable of sophisticated and wise action.

. . . For [governmental capacity to develop], civil servants need to be both technically and politically expert and perceived as such by citizens. Perpetuation of institutional memory, recruitment and retention of skilled personnel, and developing a capacity for honest and impartial judgment all require the attention of agency leaders.

It is reasonable to conclude, therefore, that—with adequate funding from Congress—functionally related roles of enforcement, standard setting, information and monitoring, planning and budgeting, international relations, and administration will lead to better institutional capacity than fragmented and disconnected federal environmental activities. Functional integration, in theory, offers a better prospect for enhanced employee morale and institutional memory than fragmented media programs and—when coupled with a concomitant emphasis on the technical merits of decisionmaking—should afford a better chance for wise judgment calls on perplexing environmental questions than the present system under the EPA.

4. Better Information and Monitoring

Title V of the proposed Act is designed “to make the Department of Environmental Protection a better source of information and more responsive to
the information that it does collect." This section consolidates existing authorities that relate to monitoring and information issues such as confidentiality and adds several new reporting provisions.

In large measure, these changes make the Act a better information and monitoring system than under current law. First, the Bureau of Environmental Statistics, which section 508 establishes, is accorded unprecedented centralized responsibility for all national environmental data, including annual reporting responsibilities regarding all aspects of the natural environment. It is reasonable to assume that formation of an elite information bureau will enhance the quantity and quality of national environmental data over time. Second, in a departure from current federal law, section 501(b) of the Act will enhance environmental monitoring in all media. As noted by the commentary that accompanies the proposed Act, "this section would, for the first time, give the [federal environmental bureaucracy] explicit direction with regard to monitoring and give the Department the authority necessary to carry out these functions." Third, with a specific statutory direction to the DEP to issue and maintain a current directory of environmental monitoring systems, the Act would discourage the unplanned growth of regulatory monitoring efforts while enhancing efficiency and public awareness of pertinent monitoring programs. No such requirement exists under current law. Moreover, the Act would require the Secretary to "collect . . . and analyze . . . [environmental monitoring] data in a way that facilitates comparison and integration with other data collected by the department." Fourth, the Secretary of the Environment is required to develop measures by which to evaluate each major program of the DEP. Perhaps surprisingly, this practice is not prevalent under current EPA programs.

5. Better Enforcement and Liability

As a matter of statutory draftsmanship, Title X of the Environmental Protection Act will tend to foster greater enforcement efficiency and effectiveness in comparison to existing law. This improvement will come about by virtue of the consolidation of various environmental enforcement provisions contained in different titles of the existing United States Code. The Act provides a flexi-

205. See supra notes 64-74 and accompanying text.
207. See id. § 502.
208. Id. § 502 analysis at 13.
209. Id. "Although development of such measures, and use of them to track progress and evaluate program effectiveness, would seem to be both good public administration and good common sense, in fact very few EPA programs have developed such measures." Id.
210. See supra note 112.
ble panoply of enforcement options, including record and reporting requirements,\^{211} compliance orders,\^{212} administrative civil penalties,\^{213} judicial civil penalties,\^{214} judicial criminal penalties,\^{215} and emergency orders and injunctive actions.\^{216}

Moreover, section 1010 of the Act, an omnibus liability section premised on the strict liability provisions and narrow defenses of sections 107 and 108 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"),\^{217} imposes strict liability for "removal and remedial actions incurred by the United States Government or a State" upon generators, past and present owners, and transporters of "pollutants."\^{218} The unstated rationale of section 1010 is to internalize society's cleanup costs by imposing monetary liability on any party contributing to an environmental externality borne by the general public. This rationale comports with well-respected economic analyses of the law that seek to avoid the "tragedy of the commons."\^{219}

6. Greater International Responsibility

The final important benefit of the Act is its focus on international considerations. "The extent to which [humankind] and its activities are part of a whole is often forgotten. Like any other species, humankind is but an element of a global ecosystem."\^{220} Therefore, in light of increased population and bur-

\begin{itemize}
  \item 211. \textit{Environmental Protection Act} § 1002 (Conservation Foundation, 2d Draft 1988).
  \item 212. \textit{Id.} § 1003.
  \item 213. \textit{Id.} § 1006.
  \item 214. \textit{Id.} § 1007.
  \item 215. \textit{Id.} § 1008.
  \item 216. \textit{Id.} § 1009.
  \item 218. \textit{Environmental Protection Act} § 1010 (Conservation Foundation, 2d Draft 1988).
  \item 219. \textit{See Hardin, The Tragedy of the Commons}, 162 \textit{Science} 1243 (1968) (arguing that "[r]uin is the destination toward which all men rush" in a finite world because the incremental cost of discharging pollution is less than the incremental cost of treating it; therefore, as long as polluting benefits the individual, individuals will continue to do so, even at the expense of their society); \textit{see also} F. ANDERSON, D. MANDELLER \& A.D. TARLOCK, \textit{ENVIRONMENTAL PROTECTION: LAW AND POLICY} 20-25 (2d ed. 1990) (describing the "tragedy of the commons" as the result where the benefits of common ownership inures to the benefit of one person while the burden must be borne by all); \textit{Croley \& Hanson, What Liability Crisis? An Alternative Explanation for Recent Events in Products Liability}, 8 \textit{Yale J. on Reg.} 1, 9-10 (1991) (stating that expanded manufacturers' liability has resulted in the internalization of two significant externalities: the nonpecuniary costs of product-caused injuries and the pecuniary costs of product accident insurance); \textit{Pierce, State Regulation of Natural Gas in a Federally Deregulated Market: The Tragedy of the Commons Revisited}, 73 \textit{Cornell L. Rev.} 15 (1987) (explaining how "the tragedy of the commons" applies in the context of the natural gas market: "an individual owning land over a natural gas field would want to produce as much gas as possible... because she will directly reap the benefits from the additional product, while the diminution in value in the field's reserves will be shared by all the other owners").
  \item 220. J. BRUNNEE, ACID RAIN AND OZONE LAYER DEPLETION: INTERNATIONAL LAW AND REG-
geoning economic activity, a nation's impact on the global environment needs to be planned carefully and made to conform with evolving principles of international environmental law.221 Title XVI of the Act emphasizes greater United States responsibility to the international community for actions that have an impact on other nation states. First, section 1601 of the Act addresses transboundary pollution to other countries.222 Inspired by section 115 of the Clean Air Act,223 section 1601 "requires the Secretary to take requisite action to prevent pollution originating in the United States from causing an unreasonable risk to another nation."224 A reciprocity requirement, however, must exist in the other nation whereby that nation accords the United States essentially the same rights with respect to prevention and control of pollution occurring in that country as is given that nation by section 1601.225 A potential problem in implementing this provision is ascertaining "unreasonable risk" in the international context. Another question is whether the American DEP Secretary will be capable or willing to apply the unreasonable risk standard delineated in section 801 of the Act226 in a rigorous and objective manner to international problems. Would it not be better for an international arbitration mechanism to be incorporated into the Act?

A second aspect of Title XVI addresses exports. Section 1602(a) of the Act exempts substances or articles intended for export from the sweep of the Act. The exception is, however, subject to a proviso that it does not apply if the "Secretary finds that the substance or article will present an unreasonable risk

221. See supra notes 100, 102 and accompanying text. See generally EVOLVING ENVIRONMENTAL PERCEPTIONS: FROM STOCKHOLM TO NAIROBI (M. Tolba ed. 1988) (compilation of key treaties, declarations, and other materials pertaining to international environmental law).
222. ENVIRONMENTAL PROTECTION ACT § 1601 (Conservation Foundation, 2d Draft 1988); cf. supra notes 155-56 and accompanying text (discussing the problem of both cross-border and inter-state pollution).
223. 42 U.S.C. § 7415 (1988). The Clean Air Act provides in pertinent part:

(a) Whenever the administrator, upon receipt of reports or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.

(b) The notice of the Administrator shall be deemed to be a finding under section 7410(a)(2)(H)(ii) of this title which requires a plan revision with respect to so much of the applicable implementation plan as is adequate to prevent or eliminate the endangerment referred to in subsection (a) of this section.

Id.

224. ENVIRONMENTAL PROTECTION ACT § 1601 analysis at 64 (Conservation Foundation, 2d Draft 1988).
225. See id. § 1601(b).
226. Id. § 801; see supra notes 89-102 and accompanying text.
within the United States."

The potential harshness of allowing export of substances found harmful under domestic law is ameliorated by the requirement in section 1602 that an American exporter "intending to export a substance that has been banned or restricted [in the United States] . . . must notify the Secretary of [the] intent to export such substance and the Secretary must notify the relevant authority in the importing country of the shipment." Moreover, sections 1602(b) and 1602(d) provide further safeguards for foreign nationals. Section 1602(b) "requires an exported substance or article to bear the same information as if it were not being exported." Section 1602(d) forbids export of waste to a foreign nation without a permit from the DEP. Another feature of section 1602 of the Act that is protective of the interests of the international community is section 1602(e), which requires "new motor vehicles or new motor vehicle engines intended solely for export to comply with the emission standards of the country to which they are being exported."

Third, section 1603 of the Act governs environmental standards of imports into the United States. Essentially, this section requires imports to comply with environmental quality specifications for domestically produced substances and articles.

Finally, section 1604(a) of the Act provides authorization for the DEP Secretary to provide environmental technical assistance to other nations and for the Secretary to participate in the work of international environmental organizations. Section 1604(b) instructs the Secretary to "provide for public participation in departmental deliberations on international [environmental] agreements."

Title XVI reflects a much needed attempt to confront the magnitude of environmental problems that arise in the international context. These provisions appear to be a comprehensive and useful approach to some of the problems in the global arena. "

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227. Id. § 1602(a)(2).
228. Id. § 1602(c)(1).
229. Id. § 1602 analysis at 65; see id. § 1602(b).
230. Id. § 1602(d); see id. § 1602 analysis at 65.
231. Id. § 1602 analysis at 65. "If the receiving nation has no emission standards, then the vehicles or engines must comply with U.S. standards." Id.; see id. § 1602(e)
232. See id. § 1603.
233. Subsections 1603(a) and (b) of the proposed act are based on section 13 of TSCA, 15 U.S.C. § 2612 (1988), with conforming modifications. Section 1603(c) is similar to section 203(b)(2) of the Clean Air Act, 42 U.S.C. § 7522(b)(2) (1988), with conforming modifications.
234. ENVIRONMENTAL PROTECTION ACT § 1604(a) (Conservation Foundation, 2d Draft 1988).
235. Id. § 1604(b).
236. While these provisions promote greater international responsibility and accountability, the separate problem remains as to the indeterminacy of the sixth factor in the test for whether "unreasonable risk" exists so as to justify particular policy choices of the Department of Environmental Protection. See supra text accompanying note 102. In weighing the propriety of any proposed action, the final factor in the six-factor test requires the Secretary to consider the "effects of the proposed action on other nations." ENVIRONMENTAL PROTECTION ACT § 801(b)(1)(F) (Conserva-
B. Problems

Despite many positive substantive and procedural qualities, the Conservation Foundation's Environmental Policy Act is flawed in six significant respects.237

1. Overlooking the Political Reality of the Congressional Committee Structure

As observed by Woodrow Wilson in his 1885 book, *Congressional Government*, "Congress, in its Committee rooms . . . is Congress at work."238 The standing committees of Congress "exist to speed the workload; to facilitate meaningful deliberations on important measures and issues; to develop a degree of expertise among committee members and committee staff; and to serve as a convenient graveyard of inept proposals."239 Indeed, congressional committees constitute "the great baronies of congressional power. Many of them look outward in jealous competition with the president, with their opposite committee in the other house, and with the whole house of which they are a part."240

While the Conservation Foundation at one time briefly addressed the enduring "political impediments to a more comprehensive, cross-media sensitive system of environmental management," in a 1986 book by Professor Barry Rabe,241 it appears that the author of the Environmental Protection Act proposal242 overlooked the political reality of the entrenched congressional committee structure in urging an integrated pollution code for the United States.

Committee jurisdiction is a sensitive, politically charged issue. As pointed out by Congressional Quarterly Inc. in a recent book:

> Jurisdictional disputes between and among committees have been evident since the inception of the standing committee system. The Legislative Reorganization Act of 1946 attempted to eliminate the problem by defining each committee's jurisdiction in detail. But the 1947 act was not able to eliminate the problem.

> . . . Such problems have continued to arise because the complexities of modern legislative proposals make it impossible to define jurisdictional
boundaries precisely.\textsuperscript{243}

Moreover, in most situations when proposals for realigning committee jurisdiction have been made, fierce turf battles have ensued. Two examples illustrate this point. In 1976, the congressional propensity to protect existing committee jurisdictional arrangements, no matter how convoluted or fragmented, was a major factor in the debate to establish a Senate Intelligence Committee.\textsuperscript{244} Again, in 1977, the problem of reallocating committee jurisdiction occurred when the Senate Rules Committee decided to support a recommendation of a select committee on the Senate committee system. The Rule Committee recommended that jurisdiction over the coastal zone management program be transferred from the Commerce Committee to a new Committee on Environment and Public Works.\textsuperscript{245} As explained in a recent book about Congress:

> When the [Rules Committee] convened . . . it was confronted by five angry members of the Commerce Committee demanding that the program be returned to them. Sen. Russell B. Long, D-La., the powerful Finance Committee chairman who also was a member of the Commerce Committee accused [the select committee] of advocating "reshuffling just for the sake of reshuffling."

> After a stormy hour, the Rules Committee . . . agreed to reconsider its action and then voted to transfer the program back to Commerce. It also agreed to the Commerce Committee members' demand that jurisdiction over oceans, weather and atmosphere and the National Oceanic and Atmospheric Administration be retained by the Commerce Committee.\textsuperscript{246}

Under the present Congressional committee structure, proposed environmental legislation is reviewed through six key committees (encompassing 22 pertinent subcommittees): the House Committee on Energy and Commerce (with pertinent subcommittees on Health and Environment, Transportation and Hazardous Materials, and Oversight and Investigations); the House Committee on Merchant Marine and Fisheries (with subcommittees on Oceanography, Fisheries and Wildlife Conservation and the Environment, Coast Guard and Navigation, and Oversight and Investigation); the House Committee on Public Works and Transportation (with subcommittees on Water Resources and Investigations and Oversight); the House Committee on Interior and Insular Affairs (with subcommittees on Energy and Environment, Mining and

\textsuperscript{243} Congresional Quarterly Inc., supra note 239, at 84 (footnote omitted).

\textsuperscript{244} Id. at 85. The Senate Intelligence Committee was given exclusive authority over the Central Intelligence Agency. However, jurisdiction over the intelligence functions of the FBI and the Defense Department was shared by the Senate Intelligence Committee, the Judiciary Committee, and the Armed Services Committee. The latter two committees vigorously resisted the transfer of intelligence jurisdiction from their purviews. In creating the panel, Congress required that two of its members be chosen from each of four committees that formerly held some jurisdiction over intelligence operations: Appropriations, Armed Services, Judiciary and Foreign Relations. Id.

\textsuperscript{245} Id. at 84.

\textsuperscript{246} Id.
Natural Resources, National Parks and Public Lands, Insular and International Affairs, Water, Power, and Offshore Energy Resources, and Oversight and Investigations); the Senate Committee on Environment and Public Works (with subcommittees on Environmental Protection, Hazardous Wastes and Toxic Substances, and Superfund and Environmental Oversight); and the Senate Committee on Energy and Natural Resources (with subcommittees on Mineral Resources Development and Production, Public Lands, National Parks, and Forests, Water and Power, and Energy Regulation and Conservation). In addition, there are numerous other congressional committees and subcommittees with important responsibilities over environmental issues, including the House Committee on Agriculture, the House Committee on Government Operations, the Senate Committee on Commerce, Science, and Transportation, and the Senate Committee on Agriculture, Nutrition, and Forestry.

Finally, "the jurisdiction of several other committees brings them in contact with environmental matters." These include both the Senate and House Committees on Appropriations, Armed Services, and the Judiciary.

Notwithstanding the overall policy sense of an integrated environmental code, "[h]olistic, interdisciplinary approaches to public policy do not come easily in the United States." As frankly acknowledged by Professor Barry Rabe, writing in a Conservation Foundation publication:

Other policy areas such as child and family welfare, vocational training, energy, mental health care, and transportation planning have also defied federal and state efforts to integrate the wide range of programs and regulatory activities that address various elements of each. Much as in environmental management, fragmentation has prevailed in these areas because of a variety of political, institutional and funding factors.

Accordingly, it is a germane threshold question to ask whether an integrated federal environmental code—with a presumed fundamental integration at both the administrative and congressional levels—is politically infeasible given "the enormous political disincentives" in a democracy, with a multiplicity of policy entrepreneurs, to "pursue 'collective action.'"

2. Overlooking the Political Reality of Agency Turf and the Difficulties of Bureaucratic Coordination

A parallel criticism of the Act is that it underestimates the complexity of the bureaucracy existing under the current system. Specifically, it ignores the

248. *Id.* at 99-100.
249. *Id.* at 100.
250. *Id.*
251. B. RABE, supra note 3, at 143.
252. *Id.*
253. *Id.* at 126 (quoting M. OLSON, THE LOGIC OF COLLECTIVE ACTION (1965)).
informal relationships and networking that has developed. This criticism incorporates many of the same arguments of the first. Moreover, it entails elements unique to the federal environmental bureaucracy. As pointed out in an American Enterprise Institute study:

To attempt fundamental reorganization of the government is to take on a political fight almost impossible to win. The lobbyists do not want change. After all, many have spent their adult lives getting to know the players in the other two corners of the triangle. The bureaucrats do not want change. No matter how often they are assured that they will not lose their jobs when they are transferred to some new and strange department, they are bound to worry. Then there is the uncertainty of who the new boss will be. Finally, the members of the congressional committees resist change since the longer they hold their committee assignments, the more influence they can exert on the department under jurisdiction.

These observations raise the question whether, notwithstanding the disappointing "incremental" environmental policy changes of media-specific environmental legislation over the last two decades, is it politically and administratively possible to enact and implement such a radical departure from the status quo as the Environmental Protection Act? Additionally, if the Act were to be enacted, what second-order consequences would ensue?

3. Emphasizing Public Health over Quality of Life

While the Conservation Foundation's legislative proposal incorporates a variety of goals and objectives, its central strategic focus emphasizes public health concerns over quality of life concerns. Quality of life concerns encompass public health concerns, but also include such factors as aesthetics, recreation, and lifestyle.

The chief evidence of this grand strategy derives from juxtaposing the central missions of the proposed DEP with the core regulatory standard of the

254. See supra notes 238-53 and accompanying text.
255. B. RABE, supra note 3, at 131 (quoting J. WHITAKER, STRIKING A BALANCE: ENVIRONMENT AND NATURAL RESOURCES POLICY IN THE NIXON-FORD YEARS 45-46 (1976)).
256. See id. at 146-52 (discussing the merits and pitfalls of incrementalist environmental policy).
257. Cf. Blomquist, Solar Energy Development, State Constitutional Interpretation and Mount Laurel II: Second Order Consequences of Innovative Policymaking by the New Jersey Supreme Court, 15 RUTGERS L.J. 573 (1985) (discussing the second-order consequences resulting from judicial activism in the land use planning context). Second-order consequences are those unforeseen occurrences which may result when the status quo is upset in order to reach some defined benefit. Id. at 590. Examples of second-order consequences of judicial activism in the context of land use planning include: an increase in the judiciary's role as a "Superzoning Board," a shift from decentralized to centralized control, and the elimination of important purposes of zoning outside of health and safety of land use considerations. Id. at 590-96.
258. See ENVIRONMENTAL PROTECTION ACT § 301(a) (Conservation Act, 2d Draft 1988). For the text of § 301(a), see supra note 41.
Act: "prevention of unreasonable risk." In essence, the Conservation Foundation is preoccupied with asking the question, "How can we make this or that safe?"

Granted, the Conservation Foundation's focus on risk reduction instead of risk elimination, by virtue of its nuanced six-factor "unreasonable risk" formulation, is commendable and, if adopted by Congress, would "explicitly raise the question of costs [and thereby] force . . . the public to consider how much it wants to spend to avoid risks, the magnitude of which are imperfectly understood." Yet, we must ask the question whether, even when properly structured, health questions alone should form the grand strategic vision of a national environmental code for the United States? Persuasive arguments for a negative answer have been articulated. As observed by Professors Landy, Roberts, and Thomas in the context of reviewing the work of the EPA:

"Continuing its "public health" orientation would condemn the EPA, and environmental concerns in general, to the role of bit players in the grand drama of pursuing improved health status. Pollution control is a much less important lever for improving public health than the control of smoking, drinking, diet, drug use, highway safety, and crime, which are all beyond EPA's control. Moreover, if EPA is to be primarily a health agency, it should be placed within the Department of Health and Human Services, where it would compete for budget dollars with other health activities ranging from kidney transplants to drug abuse prevention and Medicaid. This could prove very damaging to environmental programs. Lives saved by environmental protection efforts can cost ten to one hundred times more than saving lives through even the most expensive medical interventions, such as organ transplants. Once the public panic over hazardous waste dump sites passes, a health protection rationale would no longer justify the scale and scope of current activities. For those whose instincts suggest that a major environmental retreat would be mistaken, a vision of EPA's mandate that encompasses more than just health protection is necessary."

Indeed, it would be appropriate for the Conservation Foundation to consider an overarching strategic shift away from public health issues towards quality of life issues. A "quality of life" focus would place health concerns in a wider perspective. While quality of life issues were a critical focus of early environmental reform, they have reemerged in recent years due to three factors: "a heightened awareness of the damage that pollution does to recreation and aesthetics; a renewed consciousness of the role that land use and geographical decisions play in environmental policy making; and an increasing concern for the problem of residuals management (i.e., everything must go some-

259. Id. § 801(a); see supra notes 86-102 and accompanying text.
260. ASKING QUESTIONS, supra note 194, at 291.
261. See supra notes 89-102 and accompanying text.
262. ASKING QUESTIONS, supra note 194, at 292. "By identifying these decisions as public choices, this . . . also suggests the central role of political values in determining environmental health policy." Id.
263. Id. (footnotes omitted).
To shift away from narrow overemphasis on public health concerns and safety, the focus should widen to more general quality of life concerns. Rather than asking, "how can we make this or that safe?" a better question might be, "what should be spent, required, forbidden, or provided to improve the quality of life in this or that place thorough increased environmental protection efforts?"

4. Deemphasizing Civic Education

The Conservation Foundation’s proposal includes worthwhile integration of preexisting citizen suit provisions now scattered throughout various titles of the United States Code, incorporation of public participation procedures in rulemaking activities, and the general charge that the DEP "[in undertaking its mission [act] at all times in such a way as to promote respect for and trust in the actions and decisions of the U.S. government." Despite these provisions, the proposed act, on balance, tends to downplay civic education and responsiveness as vital environmental protection functions of the federal government.

Civic education, in the environmental policy sphere, entails two crucial elements. First, civic education must address the technical merits of a problem. This means that "the public . . . [should] learn to distinguish policies that are coherent, reconcilable with the fact, and whose means are consistent with their ends, from those that are not." Tested by this standard, the Conservation Foundation’s Environmental Protection Act is effective because of its emphasis on ascertaining the technical merits of important environmental issues, coupled with adequate channels for public communication and expression. However, with regard to the second element of civic education, "the ethical orientation that citizens adopt toward policy problems," the Conservation Foundation’s proposal is ineffective because it fails to explicitly encourage federal environmental officials to assume proactive roles as civic educators.

Indeed,

Policies and programs [should] embody concrete lessons about the nature of civic responsibilities. They can encourage citizens to accept some degree of

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264. Id. at 295 (emphasis in original).
265. Id. (emphasis omitted).
266. See supra note 60 and accompanying text.
268. Id. § 1501 analysis at 61.
269. ASKING QUESTIONS, supra note 194, at 7.
270. See supra notes 191-200 and accompanying text.
271. ASKING QUESTIONS, supra note 194, at 7.
272. Even though civic education does not receive adequate attention, the Act does have the potential to reeducate industry and government, through its emphasis on pollution control. See supra notes 188-90 and accompanying text. Unfortunately, the Act fails to provide any means for citizens to adopt such a philosophy of environmental management—a critical omission.
Without proactive civic education by federal environmental officials, the environmental values held by the citizens of this country will not change. If these attitudes remain, many of our current environmental problems will likewise persist.

5. Underestimating the Indeterminacy of the "Unreasonable Risk" Standard

The "strategic use of risk management" in environmental policy may hold promise in enhancing governmental capacity and competence in assessing the technical merits. Unfortunately, it is troublesome that the Conservation Foundation has not fully considered the limits of using an "unreasonable risk" standard as the centerpiece of its proposed federal legislation. While the Environmental Protection Act explicitly states that focus on "unreasonable risk" does not necessarily "requir[e] the Secretary to perform quantitative cost-benefit analysis" and urges the Secretary to "exercis[e] . . . judgment . . . [with] greatest weight [accorded] to the benefits of the proposed action," the Conservation Foundation does not even acknowledge that past efforts to use risk management have "generated considerable controversy within the scientific community regarding the quality of the risk assessment methodology employed."

The six-factor test for determining "unreasonable risk" in subsection 801(b) of the Act is open-ended and broadly formulated with no meaningful guidance on what weight to give each of the factors. How is the Secretary to assess "[t]he long-term and short-term actual and potential risks to man and the environment . . . including the cumulative effects of multiple sources or types of risk" in a concrete case or controversy? What is the particular meaning


274. ASKING QUESTIONS, supra note 194, at 258.

275. See supra notes 191-202 and accompanying text.


277. ASKING QUESTIONS, supra note 194, at 259 (footnote omitted).

278. ENVIRONMENTAL PROTECTION ACT § 801(b) (Conservation Foundation, 2d Draft 1988); see supra notes 89-102 and accompanying text.

279. ENVIRONMENTAL PROTECTION ACT § 801(b)(1)(A) (Conservation Foundation, 2d Draft
of "[t]he economic costs to society and to particular communities, and their
distribution of such costs?" 280 How are "[t]he effects of [a proposed regulatory
action] on technological innovation" 281 to be judged? in what industries?
in what national regions? and in what global regions? And what of the other
factors: "[t]he existence of substitute products or methods, and the costs and
benefits to society of employing such substitutes"; 285 "[t]he implementability
of the proposed action"; 286 and "[t]he effects of the proposed action on other
nations?" 284 All of these factors are profoundly indeterminate and uncertain.

Furthermore, an unposed and unanswered question regarding the Conservation
Foundation approach to environmental management is whether it is really
desirable and beneficial to replace one set of indeterminate standards, predi-
cated on various "best technology" approaches in assorted environmental me-
dia, with a so-called "integrated" indeterminate "unreasonable risk" standard.
Framed in this manner, the critical issue boils down to the intrinsic merits of
an integrated cross-media approach to environmental policy. 289 While there
are merits to a cross-media approach, 286 the notion of risk assessment should
not be oversold.

6. Underestimating the Problem of Statutory Codification at the National
Level

Neither the text nor the commentary of the Environmental Protection Act
discuss the "mind-boggling task" 287 of codifying the voluminous and complex
environmental laws of the United States. 288 On one level, the Conservation
Foundation's legislative proposal to Congress shows that "an integrated law
can be written." 288 On another level, the Environmental Protection Act draft
does "serve as a stimulus for discussion about integrated pollution control and
is a step in progressing toward a more coherent approach to environmental

1988).
280. Id. § 801(b)(1)(B).
281. Id. § 801(b)(1)(C).
282. Id. § 801(b)(1)(D).
283. Id. § 801(b)(1)(E).
284. Id. § 801(b)(1)(F).
285. One response to this argument concerning the indeterminacy of the unreasonable risk
standard may be that there are inevitable questions of interpretation that arise with every new
statute. The point is, however, that at least under the current regulatory regime, the Administra-
tor has the benefit of over 20 years of rulemaking and environmental law jurisprudence to guide
interpretation. This is an important fact which cannot be overlooked or underestimated. Is it truly
worthwhile to abandon this experience for a system that would rely on as yet unproven methods of
risk management?
286. See supra notes 186-236 and accompanying text.
287. CONSERVATION FOUNDATION, CONTROLLING CROSS-MEDIA POLLUTION, supra note 17, at
42.
288. See generally Blomquist, supra note 2, at 566 (discussing complexity of federal environ-
mental law).
289. ENVIRONMENTAL PROTECTION ACT, rationale at 1 (Conservation Foundation, 2d Draft
1988).
problems.199 However, on yet another level of analysis, the Conservation Foundation's work obscures and underestimates problems of statutory codification at the national level.

Codification of existing law is always a daunting task. While often salutary, codification is a long, laborious process that requires expert collaboration and interaction.291 Although difficult, codification and integration of environmental laws at the state level is probably an easier task than a national effort because of a more pragmatic regional focus across environmental media present at the state level.292 Arguably, national codification and integration of environmental laws should follow, as opposed to lead, state experiments. Finally, if Congress is serious about federal codification and integration of national environmental laws, it should provide further grist for the legislative mill by appointing a distinguished national Environmental Code Commission, similar to the national commission that preceded congressional deliberations on the Bankruptcy Code.293

IV. Conclusion

The Conservation Foundation's proposed Environmental Protection Act is an intriguing experiment in environmental policy integration at the federal level. Key provisions of the Act establish a new Department of Environmental Protection with expanded regulatory responsibilities, streamlined pollution control standards that focus on the concept of "unreasonable risk," and unified permitting through cross-media standards for mobile sources, point sources, nonpoint sources, substances, and miscellaneous pollution problems.

The Conservation Foundation's proposal presents both prospects and problems for wise American environmental policy. The Act is commendable for six reasons: (1) emphasis on pollution prevention and cross-media control; (2) emphasis on technical merits; (3) emphasis on governmental capacity; (4) better information and monitoring; (5) better enforcement and liability; and (6) greater international responsibility. However, before Congress seriously considers the Environmental Protection Act, six problem areas of the proposal

290. Id.
292. See generally Rabe, Cross-Media Regulatory Innovation in the American States, in Integrated Pollution Control in Europe and North America 67-81 (1990) (noting that various integrative state initiatives may well serve as models for national environmental integration).
should be resolved: (1) the political reality of the congressional committee structure; (2) the political reality of agency turf and the difficulties of bureaucratic coordination; (3) the appropriateness of emphasizing public health over quality of life; (4) the appropriateness of civic education in a federal environmental code; (5) the indeterminacy in risk assessment; and (6) the rigors of statutory codification at the national level.

In the long run, perhaps an integrated federal environmental code is in the best interests of the United States. In the short term, however, less cumbersome institutional changes, such as improved vertical and horizontal coordination among federal and state agencies or executive reorganization of pollution control agencies, would be the most effective ways to achieve a modicum of integrated environmental management.

294. See generally Conservation Foundation, Controlling Cross-Media Pollutants, supra note 17, at 39-43 (as better understanding of the nature and extent of cross-media problems evolves, society will find better ways to improve pollution control policies by using coordinating mechanisms, reorganizing institutions, and ultimately consolidating environmental laws).