



ENVIRONMENTAL LAW INSTITUTE

# **Environmental Impact Assessment:** Integrating Environmental Protection and Development Planning

June 1991

**ENVIRONMENTAL IMPACT ASSESSMENT:  
INTEGRATING ENVIRONMENTAL PROTECTION  
AND DEVELOPMENT PLANNING**

June 1991

A Working Paper prepared by the Environmental Law Institute's  
Environmental Program for Central and Eastern Europe

Copyright © 1991  
Environmental Law Institute®

*Environmental Impact Assessment: Integrating Environmental Protection and Development Planning*  
Copyright © 1991 Environmental Law Institute®. A limited license is granted to download and store in an electronic or print format one copy of the work for personal or non-profit, educational use, provided that this notice of copyright ownership and license appears on any such copy made. All other rights are reserved by the Environmental Law Institute, Washington, DC.

ELI Document No. d2.04, 76pp.

(Environmental Law Institute®, The Environmental Forum®, ELR®, and the Environmental Law Reporter® are registered trademarks of the Environmental Law Institute.)o

*Reprinted in 2000*

## ACKNOWLEDGEMENTS

*Environmental Impact Assessment: Integrating Environmental Protection and Development Planning* is one of a series of Working Papers being prepared under the auspices of the Environmental Law Institute's Law Drafting Assistance Project for Central and Eastern Europe. The paper was written by Bradley Bobertz, Staff Attorney at the Environmental Law Institute, under the editorial direction of Philip Warburg, Director of the Environmental Law Institute's Environmental Program for Central and Eastern Europe.

The following individuals provided valuable insights and assistance during interviews with the Environmental Law Institute: Carl Bausch, Attorney, U.S. Council on Environmental Quality; Barry Breen, Director of Publications, Environmental Law Institute and Editor-in-Chief, Environmental Law Reporter; Andrew Kimbrell, Attorney, The Greenhouse Crisis Foundation; Charles Lockrow, Senior Environmental Analyst, New York State Department of Environmental Conservation; Janet McCabe, Massachusetts Environmental Policy Act Director, Massachusetts Executive Office of Environmental Affairs; Tom McGrath, Project Manager, Technical Programs for Central and Eastern Europe, World Environment Center; Joseph Montgomery, Team Leader, Environmental and Regulatory Analysis Team, Office of Federal Activities, U.S. Environmental Protection Agency; Andrew Moyad, Energy and Materials Program, Office of Technology Assessment, U.S. Congress; James Roberts, Principal Environmental Planner, Global Environmental Management Services; Thomas Volk, J. Phillip Nicholson Consultants; Brian Wilson, Director of Western Region, Canadian Federal Environmental Assessment Review Office; and Ed Yates, Attorney, U.S. Council on Environmental Quality.

Manuscripts of this Working Paper were reviewed by Elissa Parker, Director of Research and Training, Environmental Law Institute; Jim McElfish, Senior Attorney, Environmental Law Institute; Frances Dubrowski, Attorney at Law; James Morris, of the law firm of Stradley, Ronon, Stevens & Young; Donald Stever, Jr., of the law firm of Sidley & Austin; and Nicholas Yost, of the law firm of Dickstein, Shapiro & Morin.

The Environmental Law Institute was founded in 1969. It is a private, non-profit organization dedicated to research and education on environmental and natural resources law and policy. The Institute's Environmental Program for Central and Eastern Europe offers technical assistance on legislative drafting and policy implementation to government officials, representatives of non-governmental organizations, and other environmental professionals in the region. The Program's activities include training workshops, joint research projects, information outreach, and specialized consultations.

Funding for the Environmental Law Institute's Law Drafting Assistance Project for Central and Eastern Europe is being provided by the World Environment Center, under an agreement with the U.S. Agency for International Development. The Environmental Law Institute's Environmental Program for Central and Eastern Europe is supported by grants from the German Marshall Fund of the United States, the Andrew W. Mellon Foundation, the Rockefeller Brothers Fund, and the United States Information Agency.

## TABLE OF CONTENTS

INTRODUCTION	1
<b>I. GOALS OF EIA LAWS</b>	5
A. <i>Establishment of a Substantive Environmental Policy</i>	5
B. <i>Improvement in Planning and Decisionmaking</i>	6
C. <i>Public Disclosure of the Environmental Effects of Proposed Actions</i>	6
D. <i>Acquisition of Information and Knowledge About the Environment</i>	8
<b>II. THRESHOLD ISSUES</b>	9
A. <i>What Kinds of Activities Does the EIA Law Cover?</i>	9
1. <i>"Private" or "Government" Actions</i>	9
2. <i>Future or Existing Activities</i>	10
3. <i>Application to Programs, Policies, and Proposals for Legislation</i>	12
B. <i>What "Impacts" are Addressed in EIA?</i>	15
1. <i>The Meaning of "Environmental" Impact</i>	15
2. <i>Indirect and Cumulative Impacts</i>	16
3. <i>"Significance" of Impacts</i>	17
<b>III. THE EIA PROCESS STEP BY STEP</b>	18
A. <i>When Does EIA Begin?</i>	18
B. <i>Screening</i>	18
C. <i>Scoping</i>	20
D. <i>Preparing the EIS</i>	22
1. <i>Who Should Prepare the EIS?</i>	22
2. <i>Who Should Pay?</i>	25
E. <i>Contents of the Environmental Impact Statement</i>	26
1. <i>Alternatives</i>	26
2. <i>Impacts</i>	27
3. <i>Mitigation</i>	29
F. <i>Public Notice and Comment on the EIS</i>	29
G. <i>The Final EIS and the Decision on the Project</i>	30
<b>IV. POST-EIS REVIEW AND MONITORING</b>	32
A. <i>Administrative Review</i>	32
B. <i>Post-EIS Monitoring</i>	34
C. <i>Judicial Review</i>	36
<b>CONCLUSION</b>	39
National Environmental Policy Act	Appendix A
CEQ NEPA Regulations	Appendix B
CEQ Scoping Guidance	Appendix C

## INTRODUCTION

Over the past two decades, Environmental Impact Assessment (EIA) has emerged as a leading tool for identifying and minimizing the adverse environmental consequences of human development. EIA reflects a preventive approach to environmental management. It seeks to incorporate environmental planning into the earliest stages of development projects and government programs in order to prevent, or to reduce as greatly as possible, the harmful ecological impacts of those activities.

Although EIA laws differ from country to country, many include both a statement of environmental policy and a set of "action-forcing" procedures designed to integrate that policy into the planning routines of government agencies and private developers. In general, the "action-forcing" procedures require the preparation of a formal document, usually called an "environmental impact statement" (EIS), which evaluates a proposed action, explores alternatives, and identifies measures to avoid or lessen the severity of unwanted impacts. The information disclosed in the EIS can form the basis for a decision either to approve or deny a proposed action, or to place conditions on its implementation.

The first significant EIA legislation, the U.S. National Environmental Policy Act (NEPA), was signed into law on January 1, 1970.<sup>1</sup> The major purpose of the statute was to declare a national policy for the environment "which will encourage productive and enjoyable harmony between man and his environment and promote efforts which will prevent or eliminate damage to the environment."<sup>2</sup> Section 102(2)(C) of NEPA contains the "action-forcing" requirement that agencies prepare

---

1. National Environmental Policy Act, 42 U.S.C. §§ 4321-4370a.

2. NEPA § 2, 42 U.S.C. § 4321. NEPA's environmental policy is further spelled out in section 101(a) of the statute, which declares that it is the nation's environmental policy is "to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." *Id.* § 101(a), 42 U.S.C. § 4331(a). Section 101(b) adds to this, stating that

it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, . . . to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; to assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings . . . .

*Id.* § 101(b), 42 U.S.C. § 4331(b).

Section 102(1) of NEPA indicates that this policy must be followed by federal agencies: "Congress authorizes and directs that, to the fullest extent possible . . . the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set for in [NEPA]." *Id.* § 102(1), 42 U.S.C. § 4332(1).

environmental impact statements for all "major federal actions significantly affecting the quality of the human environment."<sup>3</sup> Although NEPA itself does not specify the procedures governing the preparation of environmental impact statements, regulations developed by the U.S. Council on Environmental Quality (CEQ), an agency created by NEPA, explain this process in detail.<sup>4</sup> The full text of the National Environmental Policy Act and the NEPA regulations are reprinted at the end of this paper as Appendices A and B respectively.

In the years following passage of NEPA, a number of U.S. states enacted environmental policy acts. Many of these state statutes are modeled after NEPA. The New York State Environmental Quality Review Act, for example, was enacted "to declare a state policy which will encourage productive and enjoyable harmony between man and his environment . . . ."<sup>5</sup> Like NEPA, the New York statute seeks to implement this policy through "action-forcing" procedures that require the preparation of environmental impact statements for actions significantly affecting the environment.<sup>6</sup>

EIA has also emerged as an important aspect of international law. In 1985, the European Economic Community issued a directive establishing minimum requirements for EIA in all member countries.<sup>7</sup> The United Nations Environment

---

3. *Id.* § 102(2)(C), 42 U.S.C. § 4332(2)(C). According to this subsection of the NEPA, environmental impact statements must address:

- (i) The environmental impact of the proposed action.
- (ii) Any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) Alternatives to the proposed action,
- (iv) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

4. These regulations, referred to as the "NEPA regulations" in this paper, were first promulgated in 1978, although they were preceded by a series of advisory guidelines issued between 1970 and 1978. They are located in the U.S. Code of Federal Regulations, which collects and codifies all regulations written by the federal government, at Title 40, Parts 1500-1508.

5. N.Y. Environmental Conservation Law § 8-0101.

6. *Id.* § 8-109(2).

7. The Council of the European Communities, Council Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment (85/337/EEC -- OJ L 175, 5 July 1985) (EC Directive on EIA).

The EC Directive was the subject of a decade-long debate among member nations. The final text, which sets minimum standards for EIA in member countries, has been criticized for adopting "only the most meagre of provisions for project assessment which do no more than formalize those that already exist in most member states." Wathern, *The EIA Directive of the European Community*, in ENVIRONMENTAL IMPACT ASSESSMENT: THEORY AND PRACTICE 193 (P. Wathern ed. 1988).



Program adopted Goals and Principles of EIA two years later.<sup>8</sup> On February 26, 1991, twenty-six nations of the United Nations Economic Commission for Europe signed a Convention on EIA in a Transboundary Context, requiring all signatory nations to establish EIA procedures for transboundary impacts.<sup>9</sup> All Central and Eastern European countries except for the Czech and Slovak Federal Republic signed the Convention.<sup>10</sup>

The international banking community is placing increasing emphasis on EIA as well. Multilateral development banks are working to incorporate EIA procedures into their lending practices. The World Bank issued an Operational Directive in 1989 requiring EIAs for certain categories of projects.<sup>11</sup> The European Bank for Reconstruction and Development (EBRD), created last year to fund redevelopment of Central and Eastern European economies, is also likely to impose EIA requirements to further its goal of promoting "environmentally sound and sustainable development" in the full range of its activities.<sup>12</sup> The EBRD's EIA requirements, currently in the developmental stage, may well surpass those of the World Bank and the EC Directive on EIA.<sup>13</sup>

The expansion of EIA procedures internationally has important ramifications for the emerging democracies of Central and Eastern Europe. Not only can EIA be viewed as a valuable tool for advancing national environmental policies, but it can also be regarded as a prerequisite for effective relationships with other European nations and for lasting economic support from the West.

---

For an update on implementation of the EC Directive, see IUCN Commission on Environmental Policy, Law and Administration, ENVIRONMENTAL POLICY, LAW AND ADMINISTRATION, REVIEW OF THE EUROPEAN ENVIRONMENTAL IMPACT ASSESSMENT DIRECTIVE IMPLEMENTATION IN THE EEC MEMBER STATES (1990).

8. United Nations Environment Program, Goals and Principles of Environmental Impact Assessment (UNEP/GC.14/17, UNEP, Nairobi 1987) (UNEP Goals and Principles of EIA).

9. United Nations Economic Commission for Europe, Convention on Environmental Impact Assessment in a Transboundary Context (February 26, 1991) (UNECE Draft Convention on Transboundary EIA).

10. *Treaty Signed by Twenty-six Nations Sets Way to Protest Cross-Border Pollution*, INTERNATIONAL ENVIRONMENT REPORTER 99 (Feb. 27, 1991).

11. World Bank Operational Directive 4.00, Annex A: *Environmental Assessment* (Sept. 18, 1989).

12. Agreement Establishing the European Bank for Reconstruction and Development, ch. I, art. 2, ¶ 1(vii) (May 17, 1990).

13. See Center for International Environmental Law (CIEL), ENVIRONMENTAL IMPACT ASSESSMENT AND THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (Draft Paper December 1990); Schultz & Crockett, *Economic Development, Democratization, and Environmental Protection in Eastern Europe*, 18 BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW 53, 75-79 (1990).

As part of an ongoing dialogue between the Environmental Law Institute and environmental policy-makers in the Czech and Slovak Federal Republic (CSFR), Hungary, and Poland, this paper analyzes environmental impact assessment as it is currently practiced in the U.S., Canada, and selected other nations. Section I of the paper discusses some of the essential goals of EIA. Section II addresses a variety of threshold issues that new EIA laws typically confront, including the need to identify the kinds of activities that will be subject to the EIA law, and the need to define the impacts that will be analyzed in the assessment process. Section III provides a step-by-step guide to the EIA process, from the initial "screening" of a project to determine its suitability for impact assessment, through the preparation of the environmental impact statement and the final decision on the proposed action. Section IV addresses the subject of post-EIS review and monitoring. Finally, a concluding section provides some thoughts about the use of EIA procedures in Central and Eastern Europe.

## I. GOALS OF EIA LAWS

### A. *Establishment of a Substantive Environmental Policy*

Although EIA is widely known for its procedures -- particularly the environmental impact statement -- the overriding goal of NEPA and many similar statutes is to establish an environmentally sustainable policy for governmental and, in some cases, private decisionmaking. The procedural aspects of these EIA statutes can be judged by how effectively they advance this ultimate policy goal. While much of this paper focuses on procedural elements of EIA, it is important to remember that the procedures are means to an end, not ends in themselves. As the Council on Environmental Quality succinctly put it, "it is not better documents, but better decisions that count. NEPA's purpose is not to generate paperwork -- even excellent paperwork -- but to foster excellent action."<sup>14</sup>

It has proven difficult, however, to enforce the substantive policies of NEPA-like statutes directly. This difficulty has been caused in part by the breadth of the policy statements themselves. The policy declaration in NEPA, for example, directs federal agencies to use all practicable means and measures, "consistent with other essential considerations of national policy," in order that the U.S. may "fulfill the responsibilities of each generation as trustee of the environment for succeeding generations . . . attain the widest range of beneficial uses of the environment without degradation . . . [and] achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities . . . ."<sup>15</sup> Because NEPA's statement of policy is so general and contains a number of competing objectives -- environmental, social, economic, and intergenerational -- it is difficult to apply the policy in particular cases.

Even if an action can be said to violate the substantive policy of an EIA statute, difficult questions remain about who should make this determination. In the U.S., the task of enforcing compliance with NEPA has fallen primarily to the federal courts. But in NEPA, as in other areas of environmental law, the federal courts have a tradition of deference to the activities of government agencies. This tradition, combined with the breadth of NEPA's policy statement, has discouraged direct enforcement of the statute's substantive policy. Most of the court decisions and agency analysis of EIA have concentrated on maintaining or improving the procedures used in impact assessment. The expectation has been that observance of

---

14. 40 C.F.R. § 1500.1(c).

15. NEPA § 101(b), 42 U.S.C. § 4331(b). Although the term "sustainable development" was not in common usage before the publication of the Brundtland Commission report in 1987, *see* World Commission on Environment and Development, *OUR COMMON FUTURE* (1987), that term nicely embraces the essence of NEPA's environmental policy.

the procedures will force decisionmakers to confront the environmental ramifications of their proposals and therefore take action to avoid or minimize them.

### *B. Improvement in Planning and Decisionmaking*

Another important goal of EIA laws is to improve the quality of planning and decisionmaking by government agencies and private corporations and individuals. NEPA was occasioned by the failure of U.S. agencies to give appropriate weight to environmental concerns. By requiring agencies to consider the environmental consequences of their actions, and to analyze reasonable alternatives to those actions, NEPA has helped to instill a greater sensitivity to environmental issues within the government. In the context of individual projects, moreover, NEPA encourages planners to avoid or minimize the harmful results of their activities through the consideration of alternatives and mitigation measures, thus making the projects less damaging to the environment.

These benefits can also extend to the actions of private parties. An EIA law can regulate private activities directly. For example, it can require private developers to provide information about a proposed project, perform an environmental impact analysis, or implement certain measures in the construction of the project. As with the government, such requirements can make private parties more sensitive to environmental issues in general, and can improve the ecological consequences of individual projects. Even if the EIA law applies only to government actions, such as the issuance of permits to industrial facilities, private activities can still be positively influenced. Under statutes where the burden of actually performing EIAs falls on the government, the company seeking the permit may find it prudent to perform an environmental analysis of its own. This will help the company anticipate the government's EIA, and avoid impacts that might result in the denial of the permit.<sup>16</sup>

### *C. Public Disclosure of the Environmental Effects of Proposed Actions*

Perhaps the most critical goal of EIA laws is the complete, timely, and public gathering and disclosure of information about activities affecting the environment. Public involvement in EIA gives individuals and communities a voice in matters that concern them intimately: the health and well-being of their families and the quality of their surroundings. An open flow of environmental information can foster objective consideration of the full range of issues involved in development planning,

---

16. Many companies in the U.S. employ full-time environmental specialists to ensure that the company complies with environmental laws, including NEPA, and that compliance is achieved as inexpensively as possible. For further discussion, see F. Friedman, PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT (Environmental Law Institute Monograph Series 1988). Friedman, a vice president of Occidental Petroleum Corporation, provides a number of recommendations concerning environmental impact assessment under NEPA. *Id.* Chap. 9.

and can allow citizens to make reasoned choices about the benefits and risks of new activities.

Professor Joseph Sax eloquently described the need for public involvement in EIA in a recent article.<sup>17</sup> Sax writes:

As self-government is at the core of democratic government, and genuine choice is a key to self-government, assuring that risks taken are the product of such genuine choice is fundamental to the legitimacy of environmental decisions.

.....  
We cannot demand unanimity, but we can insist that decisions be made under conditions of sufficient knowledge and consideration so as to reflect a true choice fully appreciative of the consequences. The first environmental right, then, is the right to choose, and that is a right that has often been denied. The repeated efforts to portray environmentally risky activity as entirely benevolent has not only been a tactical error on the part of both government and private enterprise, but also has denied to the public a primary right in a democratic society -- the right to its own destiny.

.....  
The first step is information, because without detailed knowledge of effects there is no way to make an informed decision. The specific mechanism for such information is the environmental assessment. Impact assessment is not just desirable; it is a crucial element in legitimating risky environmental decisions.

.....  
A second step is the public release of information. The public will be the consumers of whatever environmental harm comes from permitted activity, and the public is entitled to know, inquire, and respond to the fullest information which can be provided. Whatever is withheld for fear of public reaction undermines the legitimacy of decisions made thereafter because self-determination by those affected is the central principle.

Finally there is the question of public participation. How will the information gathered and then publicly disseminated be utilized so as to set the stage for an informed decision? Unless there is some effective means for the affected public to convey its responses to decision makers, and for those responses to be conscientiously considered, the requirement that the process of consent be adequately

---

17. Sax, *The Search for Environmental Rights*, 6 JOURNAL OF LAND USE AND ENVIRONMENTAL LAW 93 (1990).

representative -- so it can legitimately serve as the consent of the public -- cannot be met.<sup>18</sup>

Because effective public knowledge and participation is so critical to EIA, many laws guarantee the right of public participation in the EIA process. The UNECE Draft Convention on Transboundary EIA, for instance, guarantees the right of public participation in areas likely to be affected by transboundary impacts.<sup>19</sup> The NEPA regulations require agencies to "[m]ake diligent efforts to involve the public" in EIAs.<sup>20</sup> Extensive public participation may be particularly important in countries where government involvement in protecting the environment is relatively new. According to the U.S. Council on Environmental Quality, "[t]he lack of reliable technical information and effective enforcement of environmental laws in developing countries accentuates the strong necessity for public participation and review."<sup>21</sup>

#### D. *Acquisition of Information and Knowledge About the Environment*

EIA procedures can facilitate the collection and evaluation of information about the effects of human activity on the environment. EIAs often include an assessment of the existing environment, thus helping planners learn about the complex interrelations of ecological systems. This information can enable scientists to develop reliable inventories of a region's environmental resources. In addition, by studying the environmental effects of development projects, planners can evaluate and compare the effectiveness of various alternatives and mitigation measures, thus improving the design of future projects.

EIA can also have a very practical goal: the collection of information necessary to determine a facility's legal responsibilities under separate environmental statutes. In the U.S. and many other countries, environmental laws are separated by medium or environmental category. There can be separate laws governing air pollution, water pollution, waste disposal, and environmental clean-up, to name but a few. Each category may be regulated by a different office within an environmental ministry or agency, and in some cases more than one ministry or agency may be involved. The EIA can serve as a means to collect and organize the information necessary to administer the wide range of these disparate regulatory programs.<sup>22</sup>

---

18. *Id.* at 97-98.

19. UNECE Draft Convention on Transboundary EIA, art. 2(6); *see also* EC Directive on EIA, art. 6(2); UNEP Goals and Principles of EIA, Principle 7; EC Environment Ministers Council Directive on the Freedom of Access to Information on the Environment, OJ 1990 L 158/56, 90/313/EEC (7 June 1990) (effective January 1993) (providing that any citizen of an EC member state shall have access to environmental information without demonstrating a particularized interest, except in specified situations).

20. 40 C.F.R. § 1506.6(a).

21. Council on Environmental Quality, ENVIRONMENTAL QUALITY 1989 51 n.101.

22. In theory, all environmental obligations could be unified in a single statute and imposed through a single permit. Efforts to unify environmental laws in the U.S. have seldom moved beyond academic discussion, however. For a comprehensive attempt to unify U.S. environmental law in a single statute,

## II. THRESHOLD ISSUES

### A. *What Kinds of Activities Does the EIA Law Cover?*

1. *"Private" or "Government" Actions.* An initial question facing policy-makers concerns the application of EIA to the activities of private developers in addition to the activities of government agencies. Both the government and private parties can significantly affect the environment. From the perspective of environmental quality, it makes little difference who carries out an environmentally damaging action. Some EIA laws, such as the EC Directive on EIA, explicitly extend to private actions. Others, such as NEPA, apply to private actions only if they are federally controlled or funded or require a federal permit. In either case, the EIA process needs to be integrated with government procedures for approving private activities.

One means of accomplishing this integration is to link EIA with the permitting or licensing of environmentally significant actions. Whenever a private developer seeks a government permit or license for such an activity, EIA can be required before the permit or license will be granted. This approach is the primary means by which NEPA reaches the activities of private developers. Although NEPA applies only to major "federal" actions, these actions can include the granting of federal permits or licenses.<sup>23</sup> Under the U.S. Clean Water Act, for example, developers of private projects expected to exceed certain statutory thresholds for water pollution must obtain a permit before commencing operations. All such projects are subject to prior EIA in compliance with NEPA.<sup>24</sup>

EIA can also be integrated with procedures for land-use planning. If a developer needs the approval of land-use planning authorities before constructing a new project, EIA can be required as part of that approval process. Denmark's EIA law illustrates this approach. Danish land-use laws are organized according to a hierarchy in which national planning directives provide the framework for regional land-use plans. These regional plans in turn provide the framework for municipal "master plans," which themselves govern all local planning. Under this system, regional planning authorities are responsible for assuring that municipal master plans, as well as local planning that takes place under them, conform to the applicable regional and national land-use plans.

When Denmark implemented the EC Directive on EIA in 1989, it simply incorporated EIA provisions into this preexisting scheme for land-use planning.

---

see The Conservation Foundation, *THE ENVIRONMENTAL PROTECTION ACT* (Discussion Draft 1988).

23. The CEQ regulations define the "federal" connection to include "projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies . . ." 40 C.F.R. § 1508.18(a).

24. When the authority for issuing permits under the Clean Water Act is delegated to a state, however, EIA has been held not to apply.

Under the unified land-use planning/EIA law, private projects undergo environmental impact analysis as part of the review process required under the land-use planning system.<sup>25</sup> In countries sharing a similar approach to land-use planning, application of EIA to private projects could be accomplished through a similar integration.<sup>26</sup>

As the foregoing discussion suggests, the line between "private" and "government" activities is not always clear. Even NEPA, which applies only to "federal" actions, extends to many "private" activities which require federal permits or licenses. Where EIA is unified with land-use planning, virtually any environmentally significant "private" action can require the prior approval of planning authorities, and hence prior environmental impact assessment. This may suggest that policy-makers can reasonably focus their attention on the precise mechanisms for integrating EIA into permitting and land-use planning systems, rather than on whether the EIA law will apply to "private" versus "government" activities per se.

2. *Future or Existing Activities.* The EIA procedures described in this paper are generally used to make decisions about *future* activities rather than to assess *existing* activities.<sup>27</sup> The theory underlying EIA is one of prevention. By studying the impacts of proposed activities, planners can abandon environmentally unacceptable projects before substantial investments have been made, or they can incorporate environmentally protective features into the design of projects at minimal cost. This reflects the common-sense observation that it is better to take the time to build something right in the first place than to worry about fixing it later.

---

25. For a full description of Denmark's land planning/EIA law, see IUCN, REVIEW OF EIA DIRECTIVE IMPLEMENTATION IN EC MEMBER STATES C1-C9.

The State of California has also integrated EIA with a system of comprehensive land-use planning. Under California land-use laws, counties and cities must prepare general land-use plans every five years. Each general plan must be accompanied by an EIA. Thereafter, development of particular projects requires approval of city or county land-use planning authorities. EIAs for such projects are linked to the process of review and approval by these authorities. See J. Roberts, JUST WHAT IS "EIR"? A DISCUSSION OF THE BASIC CONCEPTS OF THE ENVIRONMENTAL IMPACT REPORT PROCESS AND DOCUMENTATION, Chapter IV, 33-44 (July 15, 1990).

26. Integrating EIA with land-use planning not only allows for the assessment of individual projects, but also allows for the assessment of the land-use plans themselves.

27. Section 103 of NEPA, however, directed all federal agencies to "review their present statutory authority, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions" of NEPA. 42 U.S.C. § 4333.

Agency response to Section 103 was disappointing. Although one agency, the National Park Service, organized a task force and prepared a detailed document indicating how its statutory mandate could be revised to conform with NEPA, few others gave Section 103 more than cursory attention. See R. Liroff, A NATIONAL POLICY FOR THE ENVIRONMENT 118-19 (1976). Some observers argue that agencies should again be required to submit analyses of their conformity to NEPA. See, e.g., Andrews, NEPA in Practice: Environmental Policy or Administrative Reform? in Workshop on the National Environmental Policy Act, U.S. House Rep. No. 94-E, 94th Cong., 2d Sess. (Feb. 1976).



Consistent with this preventive strategy, EIA procedures create a deliberative and open system for making decisions about future activities. But the emphasis on deliberation and public participation can make EIA a time-consuming process. The EIA process typically includes public meetings to determine the scope of the impacts to be studied; the preparation and release of a draft environmental impact statement; a period for public and interagency comments on the statement; and a final environmental impact statement.

With existing facilities, the full set of deliberative procedures characteristic of EIA may be unnecessary. However, learning about the environmental impacts of current activities is critical. Without this knowledge, it is difficult to make judgments about how existing activities should be regulated. This information also enables law makers to judge the effectiveness of existing laws, and to recognize the need for new legislation. Unlike future projects, existing facilities may continue to affect the environment adversely while an EIA study is taking place. If an existing project is environmentally harmful, lengthy study may be less appropriate than swift action. For this reason, most countries do not use EIA procedures to assess the impacts of existing activities, but regulate those activities directly through other laws. In the U.S., for example, a factory must comply with air pollution, water pollution, and solid waste laws, but it will not undergo an environmental impact assessment under NEPA unless it plans a significant change in its activities.

There are several ways to gather information about the impacts of existing facilities other than using EIA procedures. Experts can visit facilities, report on their environmental impacts, and recommend responses to the problems they discover. These studies are commonly referred to as "environmental audits" or "environmental evaluations." Industrial facilities in the U.S. sometimes undertake their own "environmental audits" to assess the environmental impacts of their operations. While some companies regard these audits as solely for their own use, some policymakers believe the information obtained from the audits should also be made available to government regulators or the public.<sup>28</sup>

Governments could use a form of environmental audit to evaluate existing facilities. For example, an environmental agency or ministry could appoint a team of experts to inspect a factory, determine its environmental impacts, and make recommendations to improve its environmental performance.<sup>29</sup> This could be

---

28. For a description of environmental auditing in the United States, see Environmental Law Institute, *AN INTRODUCTION TO ENVIRONMENTAL AUDITING* (1985). Some states, such as Connecticut, require environmental assessments as conditions of certain land transfers. Others, such as New Jersey, require that cleanups be undertaken before the ownership of industrial property is transferred.

29. Over the past year and a half, teams of U.S. environmental experts have conducted several such evaluations, both of individual plants and of entire industrial sectors, in Hungary, the Czech and Slovak Federal Republic, and Poland. In the U.S., the Office of Technology Assessment and the General Accounting Office -- both research arms of Congress -- often perform similar assessments of existing activities for government-owned or operated facilities.

followed by public hearings to discuss the recommendations of the auditors. After the hearings, the agency could require the factory to implement some or all of these recommendations. The European Community Commission is currently considering an auditing program to monitor the environmental performance of existing firms. The Commission has not decided whether the auditing system will be mandatory or voluntary, however.<sup>30</sup>

Finally, the impacts of existing facilities can be disclosed though the public availability of self-monitoring data. Laws can require companies to monitor and publicly disclose their uses and emissions of certain pollutants. Under the U.S. Emergency Planning and Community Right-to-Know Act, for example, companies must disclose information about emissions and storage of hazardous pollutants in a national database called the "Toxic Release Inventory." Although this community right-to-know program does not involve assessment procedures, it provides information that allows citizens and government regulators to determine the effects of an existing facility's operations.<sup>31</sup>

3. *Application to Programs, Policies, and Proposals for Legislation.* A major purpose of EIA statutes is to influence the way the government makes decisions affecting the environment. Such decisions can involve individual projects, such as the approval of a particular coal mine. But just as often they involve broader aspects of government responsibility, such as the development of a mining policy for an entire region.

If it is important to study the effects of single projects, it may be even more important to study the programs or policies that first give rise to those projects. For example, the construction of a particular highway segment may have unacceptable environmental effects that will be revealed in an EIA. Yet if the project is carried out under a broader highway program that is itself flawed, an impact assessment of the entire program may offer a more effective means for correcting the problem than a series of site-specific EISs.<sup>32</sup>

---

30. See *Commission to Meet With Industry, Others Before Making Decision on Auditing Program*, INTERNATIONAL ENVIRONMENT REPORTER, 99-100 (Feb. 27, 1991).

31. A forthcoming ELI Working Paper, *INDUSTRY SELF-MONITORING AND PUBLIC ACCESS TO ENVIRONMENTAL DATA*, will discuss this subject in greater detail.

32. As one observer puts it:

Experience has shown that certain issues cannot be addressed efficiently at the project level. Development projects are not generally formulated in isolation. Thus, a proposal to build a nuclear power plant must be set within the context of the policies concerned with future energy supply strategies and the programmes and plans devised to implement them. Similarly, major development proposals often have such profound implications that they dictate the course of future policy.

Wathern, *An Introductory Guide to EIA*, in *EIA THEORY AND PRACTICE* 19.

Many observers argue that EIA should apply to policies, programs, and proposals for legislation as well as to individual projects.<sup>33</sup> NEPA, on its face, compels such an application. It directs federal agencies to include environmental impact statements "in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment . . . ."<sup>34</sup> The NEPA regulations, moreover, make it clear that the EIS process applies to rules and regulations, treaties and international agreements, and official policies and programs.<sup>35</sup>

In practice, most EISs in the U.S. are prepared for individual projects. This is also true of EIA in other nations.<sup>36</sup> According to a leading observer of EIA in developing countries, "[m]ost EIA work has concentrated on development projects . . . . Significantly, few EIAs have been implemented for land-use plans, sectoral plans, and, especially, the national policies which give rise to these development activities."<sup>37</sup>

---

33. The EC Directive on EIA has been criticized for its narrow application only to "public and private projects." See EC Directive, arts. 1(1), 1(2); CIEL, *EIA AND THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT* 3-4; Wathern, *The EIA Directive of the European Community*, in *EIA THEORY AND PRACTICE* 201.

34. NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C).

35. 40 C.F.R. § 1508.18(b). According to this provision, "federal actions" requiring environmental analysis under NEPA

tend to fall within one of the following categories:

(1) Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedure Act, 5 U.S.C. 551 *et seq.*; treaties and international conventions or agreements; formal documents establishing an agency's policies which will result in or substantially alter agency programs.

(2) Adoption of formal plans, such as official documents prepared or approved by federal agencies which guide or prescribe alternative uses of Federal resources, upon which future agency actions will be based.

(3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.

(4) Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.

The U.S. Forest Service, for example, prepares EISs in connection with its regular forest planning processes. See Ackerman, *Observations of the Transformation of the Forest Service: The Effects of the National Environmental Policy Act on U.S. Forest Service Decision Making*, 20 *ENVIRONMENTAL LAW* 703 (1990).

36. See Wathern, *An Introductory Guide to EIA*, in *EIA THEORY AND PRACTICE* 19.

37. Bisset, *Methods for Environmental Impact Assessment: A Selective Survey with Case Studies*, in *ENVIRONMENTAL IMPACT ASSESSMENT FOR DEVELOPING COUNTRIES* 3 (Biswas & Geping eds. 1987).

One reason why EIAs are rarely performed outside the context of projects may be that the EIS process is too cumbersome and slow to be applied to rapidly evolving policies and proposals for legislation. A solution to this problem might be to use streamlined EIA procedures for policies and legislative proposals. Under NEPA, federal agencies are required to prepare EISs as part of recommendations or reports on proposals for legislation.<sup>38</sup> These "legislative EISs" have, in fact, been rarely performed by federal agencies. Even where they have been performed, legislative EISs follow an abbreviated process for environmental impact analysis that dispenses with many of the opportunities for public review common in project-specific EISs. For example, an agency recommending or reporting on legislative proposals does not need to engage in public scoping or, except in specified circumstances, prepare a draft EIS for public comment.<sup>39</sup>

The government of Canada is presently considering an innovative approach to programmatic and legislative EIAs.<sup>40</sup> If implemented, the Canadian system would create two tracks for EIA: the first for ordinary projects and the second for policies, programs, and legislative proposals. EIAs for projects would include the elements of a full-scale impact assessment, including opportunities for extensive public participation, preparation of a thorough environmental impact statement, and review of the statement by an assessment panel. EIAs for policies, programs, and legislative proposals would require a "statement of environmental implications," a summary of which would be released to the public. The Minister of Environment would review each of these statements, and the Standing Committee on the Environment in the Canadian House of Commons could convene hearings when necessary. The Canadians hope this system of public scrutiny and executive and parliamentary review will lead to effective policy-level assessments, which are not performed under the current system.<sup>41</sup>

If EIA is applied to a program or policy, subsequent EIAs may be required for specific projects that are developed under that program or policy. To avoid confusion and duplication of effort in these situations, the EIA preparer can employ a process known in the U.S. as "tiering." Tiering is a method of organizing EIA work to correspond to the appropriate phase of development, incorporating by reference all prior EIA documentation.<sup>42</sup> It is used, for example, when the sequence of EIAs is "[f]rom a program, plan, or policy environmental impact statement to a program,

---

38. NEPA 102(2)(C), 42 U.S.C. 4332(2)(C).

39. *See* 40 C.F.R. 1506.8.

40. *See* Federal Environmental Assessment Review Office, FEDERAL ENVIRONMENTAL ASSESSMENT: NEW DIRECTIONS 7 (September 1990).

41. *Id.*

42. 40 C.F.R. 1508.28.

plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis."<sup>43</sup>

## B. What "Impacts" are Addressed in EIA?

1. *The Meaning of "Environmental" Impact.* Questions often arise concerning the types of "environmental" impacts that are appropriate for EIA. The term "environmental impact" resists precise definition. Some impacts, such as water pollution and soil erosion, fit easily within the common understanding of effects on the natural or physical environment. Other impacts, such as unemployment and effects on community structure, are not "environmental" impacts in the traditional sense, yet they are often linked to human activities that alter the physical environment. If the term "environmental impact" is defined too narrowly in EIA legislation, it can exclude important effects from the scope of impact studies. At the same time, an excessively broad definition of "environmental impact" might require EIAs to address a prohibitively extensive array of social and economic as well as environmental impacts.

A solution to this dilemma can be to define "environmental impact" in a traditional manner (i.e., alteration of the physical environment) for the purpose of triggering the EIA process, and defining it more broadly for the purpose of analysis once the EIA process has been triggered. In other words, an activity must affect the physical environment in order to require the preparation of an environmental impact statement. Once this threshold has been passed, other impacts, including socio-economic impacts, can be among those addressed in the EIA. This is the approach followed by the NEPA regulations:

"Human environment" shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.<sup>44</sup>

---

43. *Id.* For example, the overall effects of a nationwide coal leasing program can first be analyzed in a programmatic EIS. Then the specific impacts of particular mining projects can be evaluated as each leasing area or region is offered for lease under the program.

44. 40 C.F.R. 1508.14. This general approach is also followed in the UNECE Convention on Transboundary EIA, which defines environmental "impact" to include

any effect caused by a proposed activity on the environment including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interaction among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors . . . .

2. *Indirect and Cumulative Impacts.* The environmental impacts of an activity often extend beyond its immediate effects. To gain an appreciation of an activity's full range of impacts, EIAs can evaluate "indirect" and "cumulative" impacts as well as "direct" ones.

As defined in the NEPA regulations, "direct" effects are those "which are caused by the action and occur at the same time and place."<sup>45</sup> An example might be the immediate damage to trees, land, and wildlife caused by building a road through a forest. "Indirect" effects are defined as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable"<sup>46</sup> -- for instance, the traffic and logging that will follow construction of the road through the forest.<sup>47</sup>

The concept of "cumulative" impacts is more complex. As defined in the NEPA regulations, a cumulative impact is

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.<sup>48</sup>

A recent U.S. court decision involving the cumulative impacts of offshore oil drilling helps to illustrate the idea of cumulative impacts. In *Natural Resources Defense Council v. Hodel*,<sup>49</sup> the Department of Interior prepared an EIS as part of a leasing plan for offshore oil exploration between Alaska and southern California. Although the Department assessed the impacts of oil drilling on migratory species in particular areas along this range, it failed to assess the total effect of these impacts. Species such as the California grey whale swim the full length of the drilling area during their yearly migration, and would encounter the harmful effects of oil development at many points along their journey. The full effect of these impacts, when considered together, would exert a greater toll on the species than the individual impacts considered by themselves. Because the Department considered

---

UNECE Convention on Transboundary EIA, art. 1(vii).

45. 40 C.F.R. 1508.8(a).

46. *Id.* 1508.8(b).

47. According to the NEPA regulations, "[i]ndirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." 40 C.F.R. 1508.8(b).

48. 40 C.F.R. 1508.7.

49. 865 F.2d 288 (D.C. Cir. 1988).

only the individual impacts, but not their cumulative effects, the court ruled that its impact statement violated NEPA.<sup>50</sup>

3. *"Significance" of Impacts.* Full-fledged EIAs cannot practicably be undertaken for *every* project or policy, no matter how insignificant its impacts. To do so would be prohibitively expensive, and would divert time and energy away from more important assessments. Thus EIA procedures generally apply only to activities likely to have "significant" environmental impacts. NEPA, for example, requires agencies to prepare EISs for "major Federal actions *significantly* affecting the quality of the human environment."<sup>51</sup> Similarly, the EC Directive on EIA "appl[ies] to the assessment of the environmental effects of those public and private projects which are likely to have *significant* effects on the environment."<sup>52</sup>

Determining the "significance" of impacts can be difficult. It requires consideration not only of a project's size, location, and immediate impacts, but also its long-term effects and indirect and cumulative impacts on the environment. To aid this determination, many EIA laws use "screening" methods to identify projects likely to have significant environmental impacts. Approaches to "screening" are discussed in Section III.B below.

---

50. *Id.* at 297-300. For an informative discussion of cumulative impact analysis under NEPA, see Thatcher, *Understanding Interdependence in the Natural Environment: Some Thoughts on Cumulative Impact Assessment Under the National Environmental Policy Act*, 20 ENVIRONMENTAL LAW 611 (1990).

The Canadian Environmental Assessment Research Council has developed a typology of cumulative environmental effects, which include "time crowding" (frequent and repetitive impacts on a single environmental medium), "space crowding" (high density of impacts on a single environmental medium), and "compounding effects" (synergistic effects arising from multiple sources on a single environmental medium). Canadian Environmental Assessment Research Council, *ASSESSMENT OF CUMULATIVE EFFECTS: A RESEARCH PROSPECTUS* (1988).

51. 42 U.S.C. 4332(2)(C) (emphasis added).

52. EC Directive on EIA, art. 1(1) (emphasis added).

### III. THE EIA PROCESS STEP BY STEP

This section of the paper provides a step-by-step guide to the EIA process. As discussed above, application of EIA to policies, programs, and proposals for legislation, or to existing activities, may require significant modifications in the EIA procedures. For the sake of clarity and simplicity, this section does not attempt to explore all of the ways that EIA can be adapted for these purposes. Except where explicitly noted, this section will assume that the activity under consideration is a proposal for a new project.

#### A. *When Does EIA Begin?*

An overriding goal of EIA laws is to incorporate environmental considerations into the planning of actions that will affect the environment. To be effective, therefore, EIA is applied at an early stage of a project, before plans and commitments have solidified. Early application of EIA enables planners to examine the impacts of various options in designing a project, and, with these alternatives in mind, to plan and carry out the project in an environmentally sound manner. Even though EIA may slow down project planning, it can prevent longer delays after a project has begun. The discovery of unanticipated effects at later stages of a project may lead developers either to ignore those effects or to change their plans at a time when it is difficult, time-consuming, and expensive to do so. Neither of these delayed responses is desirable, and both can be avoided by the *early* application of EIA.<sup>53</sup>

#### B. *Screening*

A beginning step in any EIA is the decision to apply or not to apply EIA procedures to the project at hand. This is often called "screening" a project to determine its suitability for EIA. To minimize disputes over whether EIA will apply in particular cases, and to make the EIA system predictable and easy to administer, the EIA law can specify which kinds of activities will trigger EIA procedures, and how the decision to apply EIA will be made. The United Nations Environment Program advocates a clear and simple approach to screening. In its declaration of Goals and Principles of EIA, it states that "[t]he criteria and procedures for determining whether an activity is likely to significantly affect the environment and is therefore subject to an EIA, should be defined clearly by legislation, regulation, or other means, so that subject activities can be quickly and surely identified, and EIA can be applied as the activity is being planned."<sup>54</sup>

---

53. *To promote early application of EIA procedures, the NEPA regulations require federal agencies to "integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts."* 40 C.F.R. 1501.1.

54. UNEP, Goals and Principles of EIA, Principle 2.



There are two general approaches to screening, and many EIA laws use a combination of both approaches. The first can be called a "categorical" approach to screening. Under this approach, the EIA law lists specific categories of projects which will always require EIAs. Projects can be included in the list based on their size and their likely impacts, and the list can also identify particularly sensitive areas in which any project must be preceded by an EIA.<sup>55</sup> The categorical approach has the advantage of reducing uncertainty and delay in determining which projects will be subject to EIA. It also affords predictability and makes the EIA law easier to administer. These considerations may be especially important where funds for administering the EIA law are limited.

The EC Directive on EIA provides an example of the categorical approach to screening. In Annex I, the Directive lists certain classes of projects that must always be subject to EIA, including the construction of motor vehicle expressways and crude-oil refineries. In Annex II, it lists other classes of projects, such as shipyards and wastewater treatment plants, that will be subject to EIA "where Member States consider that their characteristics so require."

The second approach to screening can be called "discretionary." Under this approach, a government agency has discretion to decide whether a particular activity must be preceded by an EIA. Usually an initial study, called an "environmental assessment" in the U.S. and an "initial impact evaluation" in some other countries, is undertaken to aid this determination. The discretionary approach offers a flexible means of applying EIA requirements in unusual cases that might be difficult to anticipate and list in the EIA law.

A discretionary approach to screening is commonly used under NEPA. The decision to go forward with a full EIS is usually preceded by an initial "environmental assessment" which is used to determine the environmental significance of an action.<sup>56</sup> The environmental assessment must include a discussion of the need for the proposal, alternatives, and environmental impacts of the proposed action and alternatives.<sup>57</sup> If the environmental assessment reveals that a project will significantly affect the quality of the human environment, then a full environmental impact statement is required. If not, then the responsible agency must prepare a "finding of no significant impact" (FONSI) which briefly explains why the project will not significantly affect the environment.<sup>58</sup>

---

55. Thailand's EIA law, for example, identifies environmentally sensitive areas on which development must be preceded by an EIA.

56. See 40 C.F.R. 1508.9. The concept of environmental "significance," as defined in the NEPA regulations, requires consideration of both the context and intensity of a project's possible impacts. The "context" of impacts refers to their setting, scope, and duration, while "intensity" refers to their severity. See *id.* 1508.27.

57. 40 C.F.R. 1508.9(b).

58. *Id.* 1508.13.

Increasingly, the environmental assessment ends the environmental review process in the U.S. An average of 1800 full EISs were prepared each year in the early 1970s.<sup>59</sup> By 1990, that number had fallen to 477.<sup>60</sup> This sharp downward trend in EISs reflects a growing reliance on the environmental assessment as the primary document and decisionmaking tool for EIAs in the U.S. During environmental assessments, agencies often identify means to redesign or lessen the adverse impacts of projects. Relying on these mitigation measures, the agency can issue a special kind of "finding of no significant impact" commonly known as a "mitigated FONSI." By the late 1980s, environmental assessments accompanied by "mitigated FONSI" took the place of full EISs in a large number of cases.

While the mitigated FONSI offers a time-efficient means of identifying and incorporating environmentally protective features in a project, two considerations may limit its value. First, recent court rulings in the U.S. have made it difficult for citizens to enforce mitigation measures in court. Even if an agency bases its finding of no significant impact on certain mitigation measures, recent court decisions have indicated that the agency probably cannot be forced through a lawsuit to carry out those measures.<sup>61</sup> Second, public participation in the EIA process does not typically begin until the decision to prepare a full EIS has been made. Thus, when assessment of a project ends with a mitigated FONSI, the public typically does not have much of a voice in the agency's decision.

### C. Scoping

When a full environmental impact assessment is required, it is essential to plan the scope of the EIA study at the beginning of the process. Many projects involve a large number of possible alternatives and impacts. For example, a new highway might be built along one of several routes, or the need for the highway might be satisfied through other forms of transportation. Each of these alternatives could have a variety of environmental impacts, some more significant than others. In order to carry out the EIA in an efficient and organized manner, the scope of the issues to be studied can be agreed on at the beginning of the process. This early planning phase of EIA is widely known as "scoping."

---

59. V. Fogleman, GUIDE TO NEPA 112 (1990).

60. Council on Environmental Quality, ENVIRONMENTAL QUALITY 1990: THE TWENTY-FIRST ANNUAL REPORT OF THE COUNCIL OF ENVIRONMENTAL QUALITY 238 (1991).

61. The basis for these decisions, as discussed further in Section IV of this paper, may be unique to judicial review of agency decisions in the U.S., and can be avoided in other countries through careful statutory drafting. Although it may be difficult to *force* an unwilling agency to implement mitigation measures identified in a mitigated FONSI, agencies can, in their discretion, impose mitigation measures "as enforceable permit conditions, or adopt[ ] [mitigation measures] as part of the agency final decision in the same manner that mitigation measures are adopted in the formal Record of Decision that is required in EIS cases." Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations" (Forty Most Asked Questions), 46 Fed. Reg. 18026 (Mar. 23, 1981), as amended, 51 Fed. Reg. 15618 (Apr. 25, 1986), *reprinted in* Environmental Law Institute, NEPA DESKBOOK 268, 278 (1989).

Scoping originated in the 1970s as a response to haphazard implementation of NEPA by U.S. agencies. Planning of environmental impact studies varied widely during NEPA's early years. Some agencies analyzed every conceivable impact, regardless of its significance, and prepared enormous environmental impact statements. Due to their length and breadth, these EISs sometimes obscured the most important issues in a mass of trivial detail. Other agencies were guilty of the opposite problem, preparing skimpy EISs that analyzed few issues in adequate detail. To remedy this problem, the Council on Environmental Quality's 1978 NEPA regulations imposed a requirement on all agencies to engage in "scoping" at the beginning of the EIS process.<sup>62</sup>

Scoping, according to the regulation, must be used to "[d]etermine the scope and the significant issues to be analyzed in depth in the environmental impact statement," and to "[i]dentify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review . . . ."<sup>63</sup> During scoping, the agency must assign responsibility for preparing the EIS among the various agencies involved, and indicate the relationship between the EIS process and each agency's tentative planning and decisionmaking schedule.<sup>64</sup>

One of the major benefits of scoping is the involvement of the public in planning EIA studies. Under the NEPA regulations, an agency must notify the public that it intends to prepare an EIS and invite public participation in scoping by publishing a "notice of intent" in the *Federal Register*.<sup>65</sup> Citizens often have excellent firsthand knowledge of local conditions and resources. They might know, for example, that a certain stream is prized for its fishing. If the public is not involved in the scoping process, impacts on resources such as these, although quite significant to the community, might not receive adequate attention in the EIA. Ultimately, this could lead to a project that provokes strong public opposition and political backlash against the government and the developer. Early public involvement can help minimize these problems by identifying the issues that truly concern the community, designing an environmental impact study that will analyze these issues.

Scoping typically takes place in a meeting or series of meetings involving the public, the developer, and the responsible government agencies. Scoping meetings can be conducted in a number of ways, and the appropriate structure for the meeting will depend on the number of participants involved and the nature and complexity

---

62. 40 C.F.R. 1501.7: "There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This process shall be termed scoping." The Council on Environmental Quality borrowed the concept of scoping from EIA regulations already in force in the state of Massachusetts.

63. *Id.* 1501.7(a)(2)-(3).

64. *Id.* 1501.7(a)(4)-(7).

65. *Id.* 1501.7. This notification procedure is similar to the notice and comment rulemaking procedures described in the Environmental Law Institute, PUBLIC PARTICIPATION IN ENVIRONMENTAL REGULATION 5-24 (January 1991).

of the project. For example, a meeting involving a large number of participants might be structured like a public hearing, with interested parties taking turns presenting their testimony.<sup>66</sup> Smaller scoping sessions can be conducted like business meetings, with participants contributing as they wish to the discussion of topics set forth in an agenda. Some scoping meetings can be organized in a "workshop" format, with participants exploring different design alternatives in small groups. The Council on Environmental Quality has published a document that contains a number of helpful suggestions for scoping meetings.<sup>67</sup> A copy of this document is reprinted at the end of this paper as Appendix C.

The importance of scoping has been highlighted by many observers. An official from the United States Forest Service called scoping "the most important part of the National Environmental Policy Act implementing process" because it "builds agency credibility and public support; provides an excellent opportunity for dispute resolution, even before documents are prepared and decisions made; and substantially reduces the number of subsequent appeals and lawsuits."<sup>68</sup> Setting priorities through scoping can be especially important where resources for EIA are limited. For this reason, scoping has been strongly recommended for EIA in developing countries.<sup>69</sup>

#### D. *Preparing the EIS*

1. *Who Should Prepare the EIS?* Under some EIA laws, the project proponent is responsible for the actual preparation of the impact statement. EIA procedures in the Philippines illustrate this approach. Under Philippine law, the National Environmental Policy Council (NEPC) oversees the EIA process, which applies to both public and private activities. In the planning stage of a new project, the proponent must submit a description of the project to an "EIS Review Committee" of the NEPC. Based on this description, the EIS Review Committee determines whether the project is environmentally critical or will be located in an environmentally critical area -- the criteria which trigger the need for a full EIS. If an EIS is required, the proponent is required to prepare the document. The completed EIS is then reviewed by the EIS Review Committee, which recommends to the President or her authorized representative whether an "Environmental

---

66. This is generally the way scoping meetings are conducted under Canadian EIA laws. See Beanlands, *Scoping Methods and Baseline Studies in EIA*," in EIA THEORY AND PRACTICE 38.

67. CEQ Scoping Guidance, Apr. 30, 1981.

68. Ketcham, *How Does the Scoping Process Affect the Substance of an EIS?*, in Council on Environmental Quality, Environmental Law Section of the New York Bar Association, ENVIRONMENTAL IMPACT ASSESSMENT: PROCEEDINGS OF A CONFERENCE ON THE PREPARATION AND REVIEW OF ENVIRONMENTAL IMPACT STATEMENTS 84 (N. Robinson ed. 1987).

69. See Bisset, *Methods for Environmental Impact Assessment: A Selective Survey with Case Studies*, in EIA FOR DEVELOPING COUNTRIES 4-5; Beanlands, *Scoping Methods and Baseline Studies in EIA*," in EIA THEORY AND PRACTICE 33.

Compliance Certificate" should be issued. Work may not begin on the project until such a certificate has been awarded.<sup>70</sup>

There are advantages to requiring the proponent to prepare the EIS. During the planning of a project, the proponent will have already gathered information about the site, and, arguably at least, can assess the environmental effects of the project at lesser cost than could an outside agency. After the EIA has been performed, the proponent may also be in a better position to integrate the environmental considerations identified in the EIA into the construction of the project.

The proponent, however, cannot be expected to view the project objectively. Given its self-interest in the project, a proponent may be reluctant to conduct a genuine exploration of alternatives, or it may be inclined to minimize the project's risks and exaggerate its benefits. For these reasons, governments generally conduct careful evaluations and reviews of EIAs prepared by project proponents.

Canadian EIA law provides an illustration of how the government can supervise the preparation of EIA documents by proponents. Under Canada's current federal Environmental Assessment and Review Process (EARP),<sup>71</sup> each EIS is assigned its own Environmental Review Panel which is appointed by the Minister of Environment. After conducting a public scoping, the panel issues guidelines to the proponent governing the preparation of the EIS. The proponent then prepares the EIS and submits the completed document to the panel. Another round of public hearings is conducted by the panel, this time examining the sufficiency of the EIS. When the public hearings are completed, the panel writes a report advising the responsible Minister as to modifications or conditions that should be fulfilled before the project is allowed to go forward. The proponent must abide by any post-assessment monitoring and reporting set forth as conditions to the project.

Some observers maintain that environmental impact statements should not be prepared by project proponents.<sup>72</sup> They argue that the proponent's self-interest in the project makes it an unsuitable candidate for performing the EIA study, even if

---

70. Lim, *Theory and Practice of EIA Implementation: A Comparative Study of Three Developing Countries*, 18 ENVIRONMENTAL IMPACT ASSESSMENT REVIEW 133, 135-43 (1985).

71. Revisions to Canada's federal EIA law are now under consideration by Parliament. The new law, if passed, would significantly strengthen the EIA process by requiring review panels to be fully independent of government, requiring post-EIS monitoring plans for major projects, and requiring the assessment of government policy initiatives.

72. For example, the EC Directive on EIA has been criticized for giving project proponents the responsibility for preparing EISs. See, e.g., CIEL, *EIA AND THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT* 5.

Interestingly, the draft EC Directive circulated in 1980 proposed a two-step process in which the proponent would first provide information about the environmental effects of a project, and then a *government authority* would prepare and make public an impact assessment. See N. Haigh, *EEC ENVIRONMENTAL POLICY & BRITAIN* 352 (2d ed. 1987). The second part of this process was dropped during the contentious negotiations preceding the adoption of the final directive in 1985.

the resulting impact statement is evaluated by a government agency. Instead, an independent body -- either an environmental agency or the agency having approval authority over the project -- should do the actual EIA work.

NEPA illustrates this approach to the preparation of environmental impact statements. NEPA applies only to government agencies. Even if a private developer obtains a federal permit, the permitting agency rather than the developer prepares the EIS. Proponents may, however, assist the agency in performing the "environmental assessment" -- NEPA's "screening" document for determining whether a full EIS is needed. In connection with environmental assessments, agencies may require developers to furnish information about their projects, typically in an "environmental information document" (EID).<sup>73</sup> In some cases, agencies may allow the developer itself to prepare the initial environmental assessment, although the agency must make its own evaluation of the environmental issues and take responsibility for the assessment.<sup>74</sup>

The EIA process is multi-disciplinary, and can require the expertise of a number of different specialists. Although some agencies employ environmental specialists as permanent members of their staff, others hire outside consultants to prepare their EISs. While this practice is permitted under NEPA, the NEPA regulations make it clear that federal agencies retain ultimate responsibility for environmental impact statements prepared under contract.<sup>75</sup>

When U.S. agencies use consultants to prepare EISs, they often sign a "memorandum of understanding" with both the proponent and the consultant. The memorandum provides that EPA remains ultimately responsible for the EIS prepared by the consultant, but that the consultant's fees will be paid by the proponent. During the preparation of the EIS, the agency periodically reviews the work of the consultant. The agency is also responsible for the final wording of the EIS, and for conducting the public hearings and other public comment procedures.

The practice of hiring outside consultants to prepare environmental impact statements has been criticized.<sup>76</sup> According to this line of argument, a major purpose of NEPA was to change the planning and decisionmaking routines of federal agencies -- "to internalize environmental considerations in the planning,

---

73. The U.S. EPA regulations implementing NEPA define the term "environmental information document" as "any written analysis prepared by an applicant, grantee or contractor describing the environmental impacts of a proposed action. This document will be of sufficient scope to enable the responsible official to prepare an environmental assessment as described in the remaining subparts of this regulation." 40 C.F.R. 6.101(d).

74. 40 C.F.R. 1506.5(b).

75. See 40 C.F.R. 1506.5(c).

76. See, e.g., Caldwell, *The Environmental Impact Statement: A Misused Tool*, in ENVIRONMENTAL IMPACT ANALYSIS: EMERGING ISSUES IN PLANNING 11 (R. Jain & B. Hutchings eds. 1978).

programming, and decision processes of federal agencies."<sup>77</sup> Thus the agency itself should perform the actual work of an environmental impact study, since it is through EIA work that environmental "thinking" can best permeate the agency's decisions.<sup>78</sup> This goal may be undermined if agencies do not perform their own environmental impact studies.<sup>79</sup> However, some agencies simply do not have the staffs to perform adequate EISs. For these agencies, consultants can insure that the environmental document the public and other agencies review is a first-rate rather than a third-rate one.

2. *Who Should Pay?* As a general rule, the expense of preparing an environmental impact statement for a particular development project should be included in the planning costs of that project. Thus the developer of a private project should generally bear all expenses related to preparing an EIS for the project.<sup>80</sup> In the U.S., the Independent Offices Appropriation Act authorizes federal agencies to charge a "fair and equitable" fee for EISs prepared in connection with license or permit applications.<sup>81</sup> Under this statute, an agency may enact regulations to recover the cost of preparing EISs for private development projects that require permits or licenses.<sup>82</sup> Only a minority of agencies, however, have promulgated authority to recover the costs of environmental impact assessments. EISs for government-sponsored projects and programs are paid for with public funds.<sup>83</sup>

Even if private developers are required to perform EIAs at their own expense, or to reimburse the government for doing so, government agencies will inevitably bear some costs in administering and supervising the EIA process. Experience with state environmental policy acts suggests that the cost to government and industry of an EIA program can be significant in the program's early years, but decreases as the program matures.<sup>84</sup> Moreover, the EIA process "actually saves many projects

---

77. *Id.* at 19.

78. For a general analysis of decisionmaking in government institutions, see S. Taylor, *MAKING BUREAUCRACIES THINK* (1984).

79. Despite this criticism, the use of EIS consultants by U.S. agencies is widespread. See Environmental Law Institute, *NEPA IN ACTION*. Of the nineteen federal agencies studied in this report, most used outside contractors for assistance in preparing at least some of their EISs.

80. Biswas, *Guidelines for Environmental Impact Assessment in Developing Countries*, in *EIA FOR DEVELOPING COUNTRIES* 197.

81. 31 U.S.C. 9701. See *Sohio Trans. Co. v. United States*, 766 F.2d 499, 501 (Fed. Cir. 1985).

82. See *Mississippi Power & Light v. United States Nuclear Regulatory Commission*, 601 F.2d 223, 231 (5th Cir. 1979) (NRC may recoup full cost of environmental review under NEPA in connection with licensing of nuclear power facility), *cert. denied*, 444 U.S. 1102 (1980).

83. See *Public Service Co. v. Andrus*, 433 F. Supp. 144 (D. Colo. 1977) (agency may not charge fee for programmatic EIS).

84. See Hart, *The Costs of Environmental Review: Assessment Methods and Trends*, in S. Hart, G. Enk & W. Hornick, *IMPROVING IMPACT ASSESSMENT* 339 (1984):

Since most states have incurred significant problems in initial program

money by bringing environmental thinking into the project early enough to avoid environmental constraints or to use natural conditions to enhance some aspect of the project."<sup>85</sup>

#### E. *Contents of the Environmental Impact Statement*

Environmental impact statements contain the information that allows citizens and the government to understand the risks and benefits of a project and its possible alternatives. This information is made available to the people who will be involved in the project, including environmental specialists in government, the project proponent, and the general public. The purpose of the environmental impact statement is to provide information about the project in a way that clarifies the choices available and the consequences of each choice. It is a document that aids in decisionmaking.

To accomplish these purposes, environmental impact statements typically include a detailed discussion of three essential subjects: (1) the proposed project and its alternatives; (2) the environmental impacts of each alternative; and (3) measures that can be taken to avoid or minimize unwanted impacts.<sup>86</sup> While these subjects are discussed separately below, they are clearly overlapping. For example, the decision about which alternatives to include in the EIA study, usually made during the scoping process, cannot intelligently be made without considering the environmental impacts of the possible alternatives. Despite this overlap, most EISs address alternatives, impacts, and mitigation in separate sections of the document. This helps to organize and clarify the choices available to decisionmakers, and the consequences of each choice.

1. *Alternatives.* The description of alternatives in an environmental impact statement allows for the comparison of various options in a project. The alternatives section can discuss alternatives *to* a project, such as not proceeding with the proposal, and alternatives *within* a project, such as using different kinds of materials or

---

implementation (e.g., project backlog, procedural restructuring, and delay), the costs of environmental review can be usefully expressed in terms of a program "curve" --states appear to experience an initial period of program establishment followed by a transition period of process clarification and backlog processing.

85. J. Roberts, JUST WHAT IS "EIR"? A DISCUSSION OF THE BASIC CONCEPTS OF THE ENVIRONMENTAL IMPACT REPORT PROCESS AND DOCUMENTATION 74 (July 15, 1990).

86. A completed environmental impact statement often includes all of the following: a cover sheet; a table of contents; a brief statement summarizing the EIS in non-technical terms; a description of the project and explanation of its purpose and need; a description of the environment likely to be affected by the project; an analysis of practical alternatives available; an evaluation of possible environmental consequences; a description of measures to mitigate unwanted impacts; an acknowledgement of any uncertainties or gaps in knowledge encountered in the EIA; a list of preparers; a list of agencies, organizations, and people to whom copies of the EIS have been sent; and an index and any appendices. See, e.g., 40 C.F.R. 1502.10 (recommended format for EIS); UNEP Goals and Principles of EIS, Principle 4 (list of minimum contents for EIA).



construction designs. The discussion of alternatives is considered by the Council on Environmental Quality to be "the heart of the environmental impact statement"<sup>87</sup> because it brings the possible choices in a project sharply into focus.<sup>88</sup>

Alternatives often involve location. In a proposal to build a power plant, for example, the site of the facility might be chosen from a number of possible locations. The effects of constructing the plant on each of these sites can be analyzed and compared in the EIS. Other alternatives may include the size and technological features of a project. In the proposed dredging of a navigation channel, for example, alternatives could relate to the exact placement of the channel, its depth and width, and the placement of the dredged material.<sup>89</sup>

The NEPA regulations require identification of the agency's preferred alternative and full analysis of the option of not proceeding with any action at all (the "no action" alternative),<sup>90</sup> in addition to analysis of other alternatives that may have been identified during the scoping process. Identification of the preferred alternative provides a focal point for commentary by other agencies and the public. The "no action" alternative in some cases can become the ultimate decision in the project.<sup>91</sup> In other cases, it establishes a benchmark for comparing the impacts of other alternatives.<sup>92</sup>

2. *Impacts.* Information on the environmental impacts of a project "forms the scientific and analytic basis" for the comparisons made in the alternatives section.<sup>93</sup> All significant environmental effects, including beneficial effects, and indirect and

---

87. *Id.* 1502.14.

88. Some cases may involve a large or infinite number of conceivable alternatives. For example, a proposal to protect a forest area from development could theoretically involve alternatives ranging from the protection of zero to 100 percent of the forest. See *Forty Most Asked Questions*, in Environmental Law Institute, NEPA DESKBOOK 268 (1989). In these situations, the EIS can address a reasonable range of alternatives, such as protecting zero, 10, 30, 50, 70, 90, or 100 percent of the forest. *Id.* If alternatives are eliminated from the study, the EIS can briefly discuss the reasons for their elimination. 40 C.F.R. 1502.14(a). The range of alternatives to be explored in the EIS can be agreed upon during scoping.

89. See *Final Environmental Impact Statement: Bayou La Batre Navigation Improvements* (Army Corps of Engineers) 6-19, reprinted in Environmental Law Institute, NEPA DESKBOOK at 361-74.

90. *Id.* 1502.14(e) & (d).

91. The "no action" alternative is not necessarily the one that will have the least damaging environmental impacts. For example, a decision not to widen an existing roadway may lead to the construction of an entirely new roadway nearby.

92. *Forty Most Asked Questions*, in Environmental Law Institute, NEPA DESKBOOK 268-69.

93. 40 C.F.R. 1502.16

cumulative impacts, can be addressed.<sup>94</sup> Accurate analysis of environmental impacts will assist in later discussion and decisions about the project.<sup>95</sup>

Assessment of environmental impacts requires information about the present state of the environment. Thus, one of the earliest stages of EIS preparation involves the gathering of background information about the environment in the vicinity of the project. These "baseline studies" are indispensable. But unless they are carefully planned, baseline studies can "account for a large part of the overall cost of an EIA" resulting in "a great deal of information made available on the environmental setting of a particular project [that is] irrelevant to the resolution of certain critical questions raised at later stages in the EIA."<sup>96</sup>

Because baseline studies can drain resources from other important aspects of the EIS study, care should be taken to gather information only about pertinent aspects of the affected environment. The scoping process offers an excellent opportunity to define the aspects of local environment which deserve detailed study.<sup>97</sup> In the EIS, this baseline information can be presented in a manner "commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced."<sup>98</sup>

Impact prediction is often hampered by gaps in knowledge and scientific uncertainty.<sup>99</sup> At a minimum, uncertainties can be explicitly acknowledged in the EIS.<sup>100</sup> In addition to making clear that information is lacking, the EIS can indicate the relevance of the unavailable or missing information, summarize the credible scientific evidence relevant to assessing the impact, and evaluate the impact based on methods or approaches generally accepted in the scientific community.<sup>101</sup>

Uncertainty can be particularly troubling in assessing impacts which are doubtful but, if they occurred, would have catastrophic consequences. The meltdown of a nuclear power plant or the accidental release of deadly gases near a city may be

---

94. The differences between direct, indirect, and cumulative environmental impacts are considered in greater detail in Section I.B above.

95. Methods for predicting environmental impacts vary widely in sophistication and complexity. They range from relatively simple matrices which chart project activities along one axis and environmental parameters along the other, to computer-assisted models which attempt to simulate the real-world interactions of the natural environment. For a useful summary of EIA methodology, see Bisset, *Developments in EIA Methods*, in EIA THEORY AND PRACTICE 47.

96. Beanlands, *Scoping Methods and Baseline Studies in EIA*, in EIA THEORY AND PRACTICE 39.

97. *Id.*

98. 40 C.F.R. 1502.15

99. See De Jongh, *Uncertainty in EIA*, in EIA THEORY AND PRACTICE 62.

100. See, e.g., 40 C.F.R. 1502.22; UNECE Draft Convention on Transboundary EIA, Appendix II(g); UNEP Goals and Principles of EIA, Principle 4(f).

101. 40 C.F.R. 1502.22(b).

unlikely events, but their impacts would be devastating. The NEPA regulations require agencies to evaluate low probability/catastrophic impact events of this nature. Agencies must analyze "both the lesser risks of greater harms and the greater risks of lesser harms before actions are taken to bring about the risks."<sup>102</sup>

3. *Mitigation.* Adverse impacts can be avoided or minimized by modifying the design of projects. For example, a highway can be diverted around a wildlife refuge to avoid harm to the area, or an airport can limit flights during certain hours to minimize noise pollution. Actions like these are often called "mitigation" measures. As defined in the NEPA regulations, mitigation includes avoiding impacts altogether by not taking a particular action in the project; minimizing impacts by limiting the magnitude of the project; rectifying impacts by repairing or restoring aspects of the affected environment; reducing or eliminating impacts over time by performing maintenance activities during the life of the project; and compensating for impacts by providing additions to or substitutes for the affected environment.<sup>103</sup>

Mitigation measures can be incorporated into the final decision on a project. Approval of a project may be conditioned on the fulfillment of certain mitigation measures. Even though mitigation measures do not become an enforceable component of projects under NEPA until the decision stage of EIA, which follows the release of the final environmental impact statement, it is important to specify these measures in the EIS. Like any other promise that must be fulfilled at a later time, mitigation measures are easiest to implement if they are specific and clear instead of general and vague.

#### F. *Public Notice and Comment on the EIS*

It may be useful for environmental impact statements to be prepared in two stages, a draft version and a final version, as is the practice under NEPA. Once a draft EIS is completed, citizens can be notified of their right to submit comments or attend public hearings on the EIS. If the impacts of an action are likely to be widespread, such as the effects of a national policy or statute, notice can be published in a bulletin of national circulation and mailed to anyone who requests it.<sup>104</sup> If the impacts are likely to be local, such as the effects of a single project, then additional forms of notice can be used. These can include publication in local newspapers or broadcasts over local radio or television; direct mailing to residents near the site and to other potentially interested groups and individuals; and posting of printed notices in the vicinity of the project.<sup>105</sup>

---

102. Yost & Rubin, *Analysis of the National Environmental Policy Act*, in Environmental Law Institute, NEPA DESKBOOK 15.

103. 40 C.F.R. 1508.20.

104. The NEPA regulations require agencies to publish notices of draft EISs in the *Federal Register* and to mail notices directly to interested parties. See 40 C.F.R. 1506.6(b)(1) & (2).

105. See 40 C.F.R. 1506.6(3).

Written comments and public hearings are two commonly used methods of gathering public views on EISs. One model for obtaining written comments might be the "notice and comment" rulemaking procedures established by the U.S. Administrative Procedure Act.<sup>106</sup> As in that context, the notice of the draft EIS should allow a sufficient period of time for individuals to read the EIS and prepare their comments. This period under the NEPA regulations can be no shorter than 45 days,<sup>107</sup> but often it may be useful to provide for a longer comment period.<sup>108</sup> In public hearings, citizens can testify about the draft EIS and hear the testimony of others. Because hearings allow for oral testimony, they provide an important forum for people who cannot express their views effectively in writing. Project planners may also gain a more realistic sense of community opinion by attending a public hearing rather than by simply reading written comments. For these reasons, public hearings are used extensively in the U.S. to obtain community input into draft EISs.<sup>109</sup>

### G. *The Final EIS and the Decision on the Project*

EIA laws generally require that public views be actively incorporated into the final EIA document. The EC Directive on EIA provides that public views "must be taken into consideration" by the government authority responsible for approving a project.<sup>110</sup> The NEPA regulations require agencies to provide written responses in final EISs to all comments received on draft EISs. In its response to comments, an agency must modify or correct the EIS or explain why the comments do not warrant further action, citing "the sources, authorities, or reasons" supporting its position.<sup>111</sup> The agency is also encouraged to attach to the final EIS all written comments on the draft EIS that were submitted.<sup>112</sup>

Under U.S. law, when an agency has completed its final EIS and has responded to all comments, it circulates the final document to all agencies, organizations, and individuals who submitted comments, and publishes notice of the final EIS in the *Federal Register*.<sup>113</sup> The NEPA regulations impose a 30-day waiting

---

106. See Environmental Law Institute, PUBLIC PARTICIPATION IN ENVIRONMENTAL REGULATION 17-21.

107. 40 C.F.R. 1506.10(c).

108. Under NEPA, for example, comment periods are frequently extended to 90 days.

109. Public hearings are held in about nine cases out of ten on EISs for new wastewater treatment facilities, according to a 1980 EPA study. See EPA Office of Environmental Review, EVALUATION OF EPA'S EIS PROGRAM FOR WASTEWATER TREATMENT FACILITIES, reprinted in COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY 1989 32 (table of EISs involving public participation by category, 1980).

110. EC Directive on EIA, art. 8.

111. 40 C.F.R. 1503.4(a).

112. *Id.* 1503.4(b).

113. *Id.* 1502.19.

period between the filing of the final EIS and the agency's decision on the project.<sup>114</sup> This waiting period ensures that the agency has sufficient opportunity to consider the EIS before making its decision, and allows time for additional comments.<sup>115</sup>

The final decision on a project usually involves selecting one of the alternatives identified in the EIS, along with applicable mitigation measures. Consistent with the "full disclosure" goals of EIA, the responsible authority or agency can be required to explain the reasoning of its decision. This is accomplished under NEPA by requiring agencies to publish their decisions in a document known as a "record of decision" (ROD).

The record of decision identifies all alternatives considered by the agency in reaching its decision, specifies the alternative that is least damaging to the environment, and, if this alternative is not chosen, explains why not. The ROD also discusses all policy considerations that entered into the decision, and describes how those considerations were weighed by the agency. In addition, the ROD states whether the agency has adopted "all practicable means to avoid or minimize environmental harm" from the alternative selected, and summarizes any enforcement or monitoring programs adopted for mitigation.<sup>116</sup>

---

114. *Id.* 1506.10(b)(2).

115. Although the regulations allow anyone to submit comments at any time before the agency's final decision, 40 C.F.R. 1503.1(b), the vast majority of comments are submitted on the draft EIS.

116. 40 C.F.R. 1505.2.

#### IV. POST-EIS REVIEW AND MONITORING

The effectiveness of EIA statutes, like most other laws, depends on how well they are enforced. By subjecting government decisions to public scrutiny and the influence of the political process, the "full disclosure" aspects of EIA provide one type of review. But most EIA experts agree that there should be additional procedures for reviewing and monitoring compliance with EIA laws. According to one observer, "outside or independent review . . . is a crucial element in a successful EIA process."<sup>117</sup>

In thinking about ways to enforce compliance with EIA laws, it is helpful to identify exactly *what* is being evaluated by the reviewing body. There are three separate subjects for review: (1) compliance with the rules of the EIA process, (2) the merits of the decision made as a result of that process, and (3) subsequent adherence to the terms of the decision. In other words, a reviewing body can first examine whether the various procedures of the EIA law -- from the initial screening of a project to the release of the final environmental impact statement -- were adequately followed. Second, it can examine whether the resulting decision on the project satisfies the substantive command of the statute, irrespective of procedural compliance. And third, it can examine whether the terms of the decision are being followed in the ensuing construction and operation of the project, such as whether mitigation measures are being adopted as required.

##### A. Administrative Review

Oversight by an administrative body is one option for post-EIS review. Under U.S. law, the Council on Environmental Quality and EPA are both involved in overseeing agency compliance with NEPA. The Council on Environmental Quality was created by subchapter II of NEPA. Among other responsibilities, the Council was directed

to review and appraise the various programs and activities of the Federal Government in the light of the policy set forth in subchapter I of this chapter for the purpose of determining the extent to which such programs and activities are contributing to the achievement of such policy, and to make recommendations to the President with respect thereto.<sup>118</sup>

---

117. Kennedy, *Environmental Impact Assessment in North America, Western Europe: What Has Worked Where, How, and Why*, INTERNATIONAL ENVIRONMENTAL REPTR. 261 (BNA Apr. 13, 1988). The U.S. Council on Environmental Quality has also highlighted "external review of the environmental process" as one of the features that "appears to be critical to the viability of EIS internationally." Council on Environmental Quality, ENVIRONMENTAL QUALITY 1989 42.

118. NEPA § 204(3), 42 U.S.C. § 4344(3).

Shortly after enactment of NEPA, Congress strengthened the act's administrative oversight by directing EPA to review and comment on the environmental implications of any major federal action that requires the preparation of an environmental impact statement.<sup>119</sup> In essence, EPA must "raise a red flag" whenever a major federal action is found to pose an unacceptable risk of environmental harm. If EPA finds that an action "is unsatisfactory from the standpoint of public health or welfare or environmental quality," the agency must refer the matter to the Council on Environmental Quality.<sup>120</sup>

Two factors have limited the effectiveness of NEPA's administrative review process, however. First, the Council on Environmental Quality is a very small office and can handle only a handful of referrals each year. The Council has formally considered only about 25 referrals in twenty years.<sup>121</sup> Second, EPA review is generally limited to the environmental impact statement and what the statement reveals about the impact of the project. Because the NEPA regulations require EPA to complete its review before an agency files its record of decision, EPA does not review the agency's actual decision on a project.<sup>122</sup>

This second limitation may be particularly problematic in light of a recent U.S. Supreme Court decision. In *Robertson v. Methow Valley Citizens Council*,<sup>123</sup> the Court held that agencies do not have to prepare enforceable mitigation plans as part

---

119. See Clean Air Act 309, Pub. L. No. 91-604, 12(a), 84 Stat. 1709 (Dec. 13, 1970). Although Congress added this provision to the Clean Air Act, it applies more broadly to proposals for legislation, proposed federal regulations, and other major federal actions subject to NEPA. The provision was added to the Clean Air Act, rather than to NEPA, because the Clean Air Act happened to be under consideration at the time, and it was much easier to add the provision to the Clean Air Act than to reopen NEPA.

120. *Id.* 309(b), 42 U.S.C. 7609(b).

Under authority of 309, EPA publicly grades environmental impact statements according to two standards. The first standard rates the environmental effect of the proposed action. There are four possible scores: "LO" for lack of objection; "EC" for environmental concern; "EO" for environmental objection; and "EU" for environmentally unacceptable. The second standard rates the adequacy of the environmental impact statement. Category "1" means that the EIS is adequate; Category "2" means there is insufficient information to judge the adequacy of the statement; and Category "3" means that the statement is inadequate. Thus a rating of "EU-3" would mean both that a project was environmentally unacceptable and that the environmental impact statement was inadequate. Based on its review of an EIS, EPA may request the preparation of a supplemental impact statement, recommend denial of a federal permit, or state that the project would violate an environmental law or standard, among other responses. See V. Fogleman, GUIDE TO NEPA 42-44.

121. For a report on the CEQ referral process, see Environmental Law Institute, ENVIRONMENTAL REFERRALS AND THE COUNCIL ON ENVIRONMENTAL QUALITY (1986).

122. An agency may not file its record of decision until 30 days after the filing of its final environmental impact statement. 40 C.F.R. 1506.10(b)(2). But EPA must finish its review and make any referral to the Council on Environmental Quality within 25 days after the agency files its environmental impact statement. *Id.* 1504.3(b). Thus, EPA does not generally review records of decision.

123. 490 U.S. \_\_\_, 19 ELR 20743 (May 1, 1989).

of the EIS process.<sup>124</sup> In other words, as long as an agency discusses mitigation measures that *could* be implemented, it does not actually have to implement those measures. This may mean that what EPA reviews in the environmental impact statement -- a description of a project with certain measures to mitigate adverse impacts -- is not what the agency will actually be required to do. For this reason, The *Methow Valley* decision has been criticized by observers in the U.S.<sup>125</sup> However, policymakers in other countries can easily avoid this problem by making mitigation plans as well as post-EIS monitoring and enforcement explicit components of the EIA statute.

A different form of administrative review is used in Canada. Under Canada's federal guidelines for EIA, the Minister of Environment appoints an independent "environmental assessment panel" for each proposal that would produce significant adverse environmental effects. The panel consists of four to eight members having special knowledge and expertise in the area, and is drawn from both within and outside the government. It is normally chaired by the Executive Chairman of the Federal Environmental Assessment Review Office (FEARO), the government body responsible for administering Canada's federal EIA system. Each panel writes its own set of guidelines for the preparation of EIA documents, and tailors the guidelines to the particular proposal. The panel also reviews the ensuing environmental documents for completeness and quality.<sup>126</sup> A similar process involving independent review panels is used in the Netherlands.<sup>127</sup> According to the U.S Council on Environmental Quality, the independent panels of Canada and the Netherlands have been "credited for the durability and overall effectiveness of both systems."<sup>128</sup>

### B. *Post-EIS Monitoring*

Evaluation and monitoring of a project can continue even after all EIA documents have been completed and the project has been approved. Ongoing analysis of a project, often called "post-project analysis" (PPA), has been recognized

---

124. *Id.* at 20747.

125. See, e.g., Yost, *NEPA's Promise - Partially Fulfilled*, 20 ENVIRONMENTAL LAW 533, 545-46 (1990).

126. For discussion of Canada's Federal Environmental Assessment and Review Process, see Hunt, *A Note on Environmental Impact Assessment in Canada*, 20 ENVIRONMENTAL LAW 789 (1990); Bowden & Curtis, *Federal EIA in Canada: EARP as an Evolving Process*, 8 ENVIRONMENTAL IMPACT ASSESSMENT REVIEW 97 (1988); Cotton & Emond, *Environmental Impact Assessment*, in ENVIRONMENTAL RIGHTS IN CANADA, Chap. 5, 245-84 (J. Swaigen ed. 1981); Rees, *EARP at the Crossroads: Environmental Impact Assessment in Canada*, 1 ENVIRONMENTAL IMPACT ASSESSMENT REVIEW 355 (1980).

127. Wathern, *The EIA Directive of the European Community*, in EIA THEORY AND PRACTICE 192.

128. Council on Environmental Quality, ENVIRONMENTAL QUALITY 1989 43.



as an important feature of the EIA process.<sup>129</sup> As defined in a recent report by the UNECE Task Force on Environmental Impact Assessment and Auditing, "PPAs are environmental studies undertaken during the implementation phase (prior to construction, during construction or operation and at time of abandonment) of a given activity -- after the decision to proceed has been made."<sup>130</sup>

Currently, the EIA laws of most countries do not explicitly require post-EIS monitoring. EIA legislation in the Netherlands, however, has a strong PPA provision requiring ongoing investigation of the environmental effects of any activity reviewed under the EIA law. Results of PPAs are published regularly, allowing for public scrutiny of projects as they proceed.<sup>131</sup> In the United States, NEPA lacks any formal requirement for PPA, although post-EIS monitoring is encouraged by the NEPA regulations.<sup>132</sup> In other countries, for the most part, PPA is not required.<sup>133</sup> In view of the growing acceptance of PPA, however, it appears likely that more nations will follow the lead of the Netherlands in enacting specific requirements concerning post-EIS monitoring.<sup>134</sup> For example, the most recent international agreement on EIA includes a provision requiring PPA in certain circumstances.<sup>135</sup>

A post-EIS monitoring program can be used to confirm that mitigation measures identified during the planning stages of the project are actually carried out by the developer. Monitoring can also be used to determine whether anticipated impacts have occurred, to judge their severity, and to identify unexpected impacts.

---

129. See United Nations Economic Commission for Europe, *POST-PROJECT ANALYSIS IN ENVIRONMENTAL IMPACT ASSESSMENT* (1990); Bisset & Tomlinson, *Monitoring and Auditing of Impacts in EIA THEORY AND PRACTICE* 117; Sadler, *The Evaluation of Assessment: Post-EIS Research and Process Development in EIA THEORY AND PRACTICE* 129.

130. UNECE, *POST-PROJECT ANALYSIS IN EIA* 1.

131. See UNECE, *POST-PROJECT ANALYSIS IN EIA* 46.

132. The regulations state:

Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. Mitigation ( 1505.2(c)) and other conditions established in the environmental impact statement or during its review and committed as part of its decision shall be implemented by the lead agency or other appropriate consenting agency.

40 C.F.R. 1505.3.

The Supreme Court has ruled, however, that NEPA does not require agencies actually to formulate and adopt mitigation plans as part of the EIS process. *Robertson v. Methow Valley Citizen Council*, 109 S. Ct. 1835, 1847 (1989).

133. See UNECE, *POST-PROJECT ANALYSIS IN EIA* (discussing PPA practices in 13 countries).

134. For example, the proposed reforms of Canadian EIA process include requirements concerning post-EIS monitoring.

135. See UNECE Convention on Transboundary EIA, art. 7.

Just as importantly, the knowledge gained through monitoring can be used to improve future EIAs. Studies of the project can compare the predictions made during the EIA with the impacts that actually occurred. This information tests the accuracy of EIA methods and enables planners to improve the predictive accuracy of their techniques.<sup>136</sup>

### C. Judicial Review

Court litigation has been and continues to be the most important means of reviewing EIA procedures in the United States. Lawsuits under NEPA accounted for 70 percent of all environmental litigation against the federal government in 1980.<sup>137</sup>

When NEPA was originally enacted, it was uncertain whether a court could overturn an agency decision on its merits, or whether the court would be limited to reviewing the agency's procedural compliance with the statute. Although some lower courts held that substantive review under NEPA was appropriate,<sup>138</sup> the Supreme Court has rejected this premise, holding that NEPA's mandate to federal agencies "is essentially procedural."<sup>139</sup> As the Court later explained, "[o]nce an agency has made a decision subject to NEPA's procedural requirements, the only role for a court is to insure that the agency has considered the environmental consequences; it cannot 'interject itself within the area of discretion of the executive as to the choice of the action to be taken.'"<sup>140</sup>

---

136. Learning from actual EIAs may be especially important in countries where information about environmental impacts is not widely known. CIEL, ENVIRONMENTAL IMPACT ASSESSMENT AND THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT 22-23.

137. Yost & Rubin, *Analysis of NEPA*, in Environmental Law Institute, NEPA DESKBOOK 18. Early litigation under NEPA often involved the clarification of the statute's imprecise language and extremely general declarations. This early litigation is analyzed in F. Anderson, NEPA IN THE COURTS: A LEGAL ANALYSIS OF THE NATIONAL ENVIRONMENTAL POLICY ACT (1973). In recent years, NEPA lawsuits have most commonly challenged an agency's decision not to prepare an EIS or its preparation of an allegedly inadequate one. See Council on Environmental Quality, ENVIRONMENTAL QUALITY 1989 391. A good overview of the major issues in NEPA litigation is provided in Yost & Rubin, *Analysis of NEPA*, in Environmental Law Institute, NEPA DESKBOOK 17-23. For further discussion and analysis, see V. Fogleman, GUIDE TO NEPA, Chapter 6, 168-212; D. Mandelker, NEPA LAW AND LITIGATION (1984).

138. *E.g.*, Environmental Defense Fund v. Army Corps of Engineers, 470 F.2d 289, 298 (8th Cir. 1972) ("courts have an obligation to review substantive agency decisions on the merits").

139. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978).

140. Strycker's Bay Neighborhood Council v. Karlen, 444 U.S. 223 (1980). Some state statutes clearly establish substantive judicial review of agency decisions. *The Michigan Environmental Protection Act*, for example, authorizes any "legal entity" to sue any other "legal entity" -- including the state, administrative agencies, and local governments, as well as corporations and individuals -- for relief from actual or potential "pollution, impairment or destruction" of the "air, water and other natural resources and the public trust therein." MICH. COMP. LAWS, ANN. 691.1202(1). Once the plaintiff has established a prima facie case of actual or potential impairment of the environment, the burden of proof

As a result of the Supreme Court's holdings in NEPA cases, U.S. courts now generally limit their review to questions of procedure. If an agency clears the procedural hurdles of the statute, such as identifying alternatives in the EIS and adequately inviting and responding to public comments, then courts will not evaluate the merits of the agency's ultimate decision.<sup>141</sup>

Despite the reluctance of courts in the U.S. to review agency decisions on the merits, judicial review can serve an important function in a developing EIA system. Courts are usually quite effective in understanding and enforcing the procedural requirements of a statute. In the EIA context, courts can help insure compliance with procedures requiring public involvement in the decisionmaking process, the analysis of alternatives, and the implementation of mitigation measures, all of which are critical to the success of an EIA law. The fact that EIA procedures are now widely followed in the U.S. may be largely attributable to judicial enforcement of NEPA in the early years following its enactment, when agencies were reluctant to adopt the new and unaccustomed procedures set forth in the statute.<sup>142</sup> In light of

---

falls on the defendant. The defendant may either rebut the prima facie case -- showing that environmental damage is not actually threatened -- or establish an affirmative defense that there is "no feasible and prudent alternative" to the conduct in question, and that the conduct is "consistent with the promotion of the public health, safety and welfare in light of the state's paramount concern for the protection of its natural resources." *Id.* 691.1203(1).

141. Although section 706 of the Administrative Procedure Act provides that a court "shall . . . hold unlawful and set aside agency action found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," 5 U.S.C. 706(2)(A), the latest Supreme Court decision on NEPA casts doubt on whether even this standard remains a viable ground for reversing agency decisions on their merits in cases brought under NEPA. In *Robertson v. Methow Valley Citizens Council*, 490 U.S. \_\_\_, 19 ELR 20743 (May 1, 1989), the Court rejected a challenge to an environmental impact statement prepared by the U.S. Forest Service in connection with a permit to build a major ski resort in a National Forest. In reaching its decision, the court characterized the judicial role in this manner:

If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs. In this case, for example, it would not have violated NEPA if the Forest Service, after complying with the Act's procedural requirements, had decided that the benefits to be derived from downhill skiing at Sandy Butte justified the issuance of a special use permit, notwithstanding the loss of 15 percent, 50 percent, or even 100 percent of the mule deer herd. Other statutes may impose substantive environmental obligations on federal agencies, but NEPA merely prohibits uninformed -- rather than unwise -- agency action.

*Id.* at 20747 (citations omitted). In other words, as long as the agency's environmental impact statement demonstrates "consideration" of environmental values, the agency is free to reject those values in its actual decision, apparently even if the decision is "arbitrary and capricious."

142. Much litigation in the early years of NEPA focused on clarifying the ambiguities of the statute. The need for such litigation was greatly reduced when the U.S. Council on Environmental Quality promulgated the NEPA regulations in 1978. The regulations spelled out the EIA process in detail, and dispelled uncertainty as to an agency's duties under the statute. If a country wishes to avoid the uncertainty and confusion that accompanied NEPA's early years, it may want to specify, by law or

this experience, a country implementing a new EIA law can legitimately look to judicial review as an important catalyst to compliance.

---

regulation, exactly what procedures must be followed in EIAs.

## CONCLUSION

The democracies of Central and Eastern Europe are already making impressive strides toward creating new systems for environmental impact assessment. The Polish government appointed a Commission on Environmental Impact Assessment in the spring of 1990, and the Commission has been working to incorporate EIA provisions into Poland's new environmental protection laws. Policymakers in Hungary and the Czech and Slovak Federal Republic are also working to develop new EIA procedures. As these laws are drafted and implemented, policymakers may want to consider some of the major issues that have arisen in the application of EIA procedures in the U.S. and other countries:

1) *Determining Basic Objectives.* EIA laws can accomplish a number of objectives. Impact assessment can be a process by which government regulators gather information and make decisions about proposed activities. It can also be a process for opening government planning and decisionmaking to public scrutiny, and for establishing a substantive environmental policy to guide governmental and private action. Whatever goals a country expects EIA to achieve, how can the procedures of the EIA statute be tailored to promote these goals?

2) *Integrating EIA with Permitting or Land-Use Planning.* EIA can be integrated with procedures for environmental permitting or land-use planning. Linking EIA to permitting is the normal practice in the U.S., while linking EIA to land-use planning is more common in Europe. Would either or both of these approaches provide an effective means of implementing EIA in the Czech and Slovak Federal Republic, Hungary, and Poland?

3) *Applying EIA to Programs, Plans, and Policies.* Programmatic and policy-wide assessments can be just as important as site-specific EIAs. Land-use or energy plans, for example, may establish policies for an entire region. If the plan is environmentally flawed, its problems can often be corrected most effectively through an EIA of the plan itself rather than through subsequent site-specific EIAs. But applying EIA to plans, programs, and policies has been relatively uncommon. More often than not, EIA is performed at the project level only. If this has resulted, in part, from the nature of EIA procedures, can these procedures be modified to address more effectively the EIA needs associated with plans, policies, and programs?

4) *Identifying Activities Requiring EIA.* Activities requiring environmental impact assessment can be identified in the statute itself or on a case-by-case basis by an agency. Both approaches have advantages and disadvantages. A listing of activities can reduce

uncertainty and make the EIA law easier to administer. A discretionary approach can offer greater flexibility in applying EIA to environmentally significant activities. To gain the advantages of both of these approaches, a combination of both can be utilized. For example, a statute could list certain activities that will always require EIAs but also allow an agency to require EIAs in other cases. Given this range of options, what approach or combination of approaches would be most appropriate for the Czech and Slovak Federal Republic, Hungary, and Poland?

5) *Scoping*. Deciding early in the EIA process which issues will be studied in detail can have important ramifications for the effectiveness of the ensuing EIA. Such prior planning can be accomplished through the "scoping" process. Scoping can help target scarce resources toward key issues and concerns, and can involve members of the public in EIA early in the decisionmaking process. How can scoping be utilized in the Czech and Slovak Federal Republic, Hungary, and Poland?

6) *Performing EIAs*. The actual work of environmental impact assessment can be performed by the project proponent (either a private developer or a government agency, as the case may be) or by the government body having approval authority over the project. Alternatively, the work can be shared in some manner between the reviewing agency and the project proponent. For example, the proponent could be responsible for furnishing information about the site and the nature of its operations, and the agency could be responsible for writing the environmental impact statement. Which approach is best suited to the conditions and institutional capabilities of the Czech and Slovak Federal Republic, Hungary, and Poland?

7) *Funding EIAs*. Recovery from private parties of the costs of EIA preparation can be required by specific legislation. In the U.S., the Independent Offices Appropriation Act authorizes agencies to charge a fee for EIA work performed as a prerequisite to granting a permit or license. Would similar legislation be necessary or helpful in the Czech and Slovak Federal Republic, Hungary, and Poland? If not, what other mechanisms would enable the government to recovery the cost of performing EIAs?

8) *Promoting the Analysis of Alternatives*. Analysis of alternatives may be the most vital aspect of EIA because it allows for the comparison of various options in a project based on objective information. But decisionmakers often think they have found the best way to do something, and may resist analyzing other possibilities. In what ways can EIA statutes and regulations help to insure that alternatives receive adequate consideration?

9) *Involving the Public in EIA.* Effective citizen participation in EIA can require technical expertise in a variety of fields, including ecological systems analysis, economics, and law. While many citizens' groups in the U.S. have the funding to employ environmental experts, their counterparts in Central and Eastern Europe, for the most part, have fewer resources. Given this fact, can procedures guaranteeing public participation be as effective in Central and Eastern Europe as they are in the U.S.? If citizens' organizations are not yet well-established, should funding be made available to finance their participation?

10) *Monitoring and Enforcing EIA Laws.* EIA laws generally require some means of enforcement. Oversight by an administrative body is one possibility for enforcing compliance with EIA requirements, and judicial review is another. How should lawmakers in Central and Eastern Europe enforce new systems of environmental impact assessment? Should a form of administrative review be utilized? Is judicial review a viable option? Is there a complementary role for both forms of review?

Environmental impact assessment offers a valuable tool for integrating environmental protection and development planning. As law-makers in the Czech and Slovak Federal Republic, Hungary, and Poland begin to draft and implement EIA legislation, they will face many difficult issues and decisions. Experience with EIA in the U.S., the European Community, and elsewhere may provide useful guidance as Central and East European law-makers strive to develop EIA requirements that are appropriate to their own nations' political and economic circumstances.

Appendix A

National Environmental Policy Act of 1969

42 U.S.C. §§ 4321-4370a

Copyright 1989 Environmental Law Institute.  
Reprinted with permission from the NEPA Deskbook.  
All rights reserved.



# National Environmental Policy Act

## 42 U.S.C. §§4321-4370a

Sec.		
4321.	[NEPA §2] Congressional declaration of purpose.....	28

### Subchapter I—Policies and Goals

4331.	[NEPA §101] Congressional declaration of national environmental policy.....	28
4332.	[NEPA §102] Cooperation of agencies; reports; availability of information; recommendations; international and national coordination of efforts.....	28
4333.	[NEPA §103] Conformity of administrative procedures to national environmental policy.....	29
4334.	[NEPA §104] Other statutory obligations of agencies.....	29
4335.	[NEPA §105] Efforts supplemental to existing authorizations.....	29

### Subchapter II—Council on Environmental Quality

4341.	[NEPA §201] Reports to Congress; recommendations for legislation.....	30
4342.	[NEPA §202] Establishment; membership; Chairman; appointments.....	30
4343.	[NEPA §203] Employment of personnel, experts and consultants.....	30
4344.	[NEPA §204] Duties and functions.....	30
4345.	[NEPA §205] Consultation with the Citizens' Advisory Committee on Environmental Quality and other representatives.....	31
4346.	[NEPA §206] Tenure and compensation of members.....	31
4346a.	[NEPA §207] Travel reimbursement by private organizations and Federal, State, and local governments.....	31
4346b.	[NEPA §208] Expenditures in support of international activities.....	31
4347.	[NEPA §209] Authorization of appropriations.....	31

### Subchapter III—Miscellaneous Provisions

4361.	Plan for research, development, and demonstration.....	32
4361a.	Budget projections in annual revisions of plan for research, development, and demonstration....	32
4361b.	Implementation by Administrator of Environmental Protection Agency of recommendations of "CHESS" Investigative Report; waiver; inclusion of status of implementation requirements in annual revisions of plan for research, development, and demonstration.....	32
4361c.	Staff management.....	32
4362.	Interagency cooperation on prevention of environmental cancer and heart and lung disease.....	32
4362a.	Task Force on Environmental Cancer and Heart and Lung Disease; membership of Director of National Center for Health Statistics and of head of Center for Disease Control.....	33
4363.	Continuing and long-term environmental research and development.....	33
4363a.	Pollution control technologies demonstrations.....	33
4364.	Expenditure of funds for research and development related to regulatory program activities.....	33
4365.	Science Advisory Board.....	34
4366.	Identification and coordination of research, development, and demonstration activities.....	35
4367.	Reporting requirements of financial interests of officers and employees of Environmental Protection Agency.....	35
4368.	Grants to qualified citizens groups.....	36
4368a.	Utilization of talents of older Americans in projects of pollution prevention, abatement, and control.....	36
4369.	Miscellaneous reports.....	37
4369a.	Reports on environmental research and development activities of the Agency.....	37
4370.	Reimbursement for use of facilities.....	37
4370a.	Assistant Administrators of Environmental Protection Agency; appointment; duties.....	37

term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

(i) the State agency or official has statewide jurisdiction and has the responsibility for such action,

(ii) the responsible Federal official furnishes guidance and participates in such preparation,

(iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and

(iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepares a written assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibilities for the scope, objectivity, and content of the entire statement or of any other responsibility under this chapter; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.<sup>1</sup>

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unre-

solved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by subchapter II of this chapter.

(Pub.L. 91-190, tit. I, §102, Jan. 1, 1970, 83 Stat. 853; Pub.L. 94-83, Aug. 9, 1975, 89 Stat. 424.)

### §4333. [NEPA §103]

Conformity of administrative procedures to national environmental policy

All agencies of the Federal Government shall review their present statutory authority, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this chapter and shall propose to the President not later than July 1, 1971, such measures as may be necessary to bring their authority and policies into conformity with the intent, purposes, and procedures set forth in this chapter.

(Pub.L. 91-190, tit. I, §103, Jan. 1, 1970, 83 Stat. 854.)

### §4334. [NEPA §104]

Other statutory obligations of agencies

Nothing in section 4332 or 4333 of this title shall in any way affect the specific statutory obligations of any Federal agency (1) to comply with criteria or standards of environmental quality, (2) to coordinate or consult with any other Federal or State agency, or (3) to act, or refrain from acting contingent upon the recommendations or certification of any other Federal or State agency.

(Pub.L. 91-190, tit. I, §104, Jan. 1, 1970, 83 Stat. 854.)

### §4335. [NEPA §105]

Efforts supplemental to existing authorizations

The policies and goals set forth in this chapter are supplementary to those set forth in existing authorizations of Federal agencies.

(Pub.L. 91-190, tit. I, §105, Jan. 1, 1970, 83 Stat. 854.)

<sup>1</sup>So in original. The period probably should be a semicolon.

(Pub.L. 91-190, tit. II, §204, Jan. 1, 1970, 83 Stat. 855.)

### **§4345. [NEPA §205]**

**Consultation with the Citizens' Advisory Committee on Environmental Quality and other representatives**

In exercising its powers, functions, and duties under this chapter, the Council shall—

(1) consult with the Citizens' Advisory Committee on Environmental Quality established by Executive Order numbered 11472, dated May 29, 1969, and with such representatives of science, industry, agriculture, labor, conservation organizations, State and local governments and other groups, as it deems advisable; and

(2) utilize, to the fullest extent possible, the services, facilities, and information (including statistical information) of public and private agencies and organizations, and individuals, in order that duplication of effort and expense may be avoided, thus assuring that the Council's activities will not unnecessarily overlap or conflict with similar activities authorized by law and performed by established agencies.

(Pub.L. 91-190, tit. II, §205, Jan. 1, 1970, 83 Stat. 855.)

### **§4346. [NEPA §206]**

**Tenure and compensation of members**

Members of the Council shall serve full time and the Chairman of the Council shall be compensated at the rate provided for Level II of the Executive Schedule Pay Rates (5 U.S.C. 5313). The other members of the Council shall be compensated at the rate provided for Level IV or the Executive Schedule Pay Rates (5 U.S.C. 5315).

<sup>1</sup> So in original. Probably should be "of".

(Pub.L. 91-190, tit. II, §206, Jan. 1, 1970, 83 Stat. 856.)

### **§4346a. [NEPA §207]**

**Travel reimbursement by private organizations and Federal, State, and local governments**

The Council may accept reimbursements from any private nonprofit organization or from any department, agency, or instrumentality of the Federal Government, any State, or local government, for the reasonable travel expenses incurred by an officer or employee of the Council in connection with his attendance at any conference, seminar, or similar meeting conducted for the benefit of the Council.

(Pub.L. 91-190, tit. II, §207, as added Pub.L. 94-52, §3, July 3, 1975, 89 Stat. 258.)

### **§4346b. [NEPA §208]**

**Expenditures in support of international activities**

The Council may make expenditures in support of its international activities, including expenditures for: (1) international travel; (2) activities in implementation of international agreements; and (3) the support of international exchange programs in the United States and in foreign countries.

(Pub.L. 91-190, tit. II, §208, as added Pub.L. 94-52, §3, July 3, 1975, 89 Stat. 258.)

### **§4347. [NEPA §209]**

**Authorization of appropriations**

There are authorized to be appropriated to carry out the provisions of this chapter not to exceed \$300,000 for fiscal year 1970, \$700,000 for fiscal year 1971, and \$1,000,000 for each fiscal year thereafter.

(Pub.L. 91-190, tit. II, §209, formerly §207, Jan. 1, 1970, 83 Stat. 856, renumbered Pub.L. 94-52, §3, July 3, 1975, 89 Stat. 258.)

Force"). The Task Force shall include representatives of the Environmental Protection Agency, the National Cancer Institute, the National Heart, Lung, and Blood Institute, the National Institute of Occupational Safety and Health, and the National Institute on Environmental Health Sciences, and shall be chaired by the Administrator (or his delegate).

(b) The Task Force shall—

(1) recommend a comprehensive research program to determine and quantify the relationship between environmental pollution and human cancer and heart and lung disease;

(2) recommend comprehensive strategies to reduce or eliminate the risks of cancer or such other diseases associated with environmental pollution;

(3) recommend research and such other measures as may be appropriate to prevent or reduce the incidence of environmentally related cancer and heart and lung diseases;

(4) coordinate research by, and stimulate cooperation between, the Environmental Protection Agency, the Department of Health and Human Services, and such other agencies as may be appropriate to prevent environmentally related cancer and heart and lung diseases; and

(5) report to Congress, not later than one year after August 7, 1977, and annually thereafter, on the problems and progress in carrying out this section.

(Pub.L. 95-95, tit. IV, §402, Aug. 7, 1977, 91 Stat. 791; Pub.L. 96-88, tit. V, §509(b), Oct. 17, 1979, 93 Stat. 695.)

**§4362a.**

Task Force on Environmental Cancer and Heart and Lung Disease; membership of Director of National Center for Health Statistics and head of Center for Disease Control

The Director of the National Center for Health Statistics and the head of the Center for Disease Control (or the successor to such entity) shall each serve as members of the Task Force on Environmental Cancer and Heart and Lung Disease established under section 4362 of this title.

(Pub.L. 95-623, §9, Nov. 9, 1978, 92 Stat. 3455.)

**§4363.**

Continuing and long-term environmental research and development

The Administrator of the Environmental Protection Agency shall establish a separately identified program of continuing, long-term environmental research and development for each activity listed in section 2(a) of this Act. Unless otherwise specified by law, at least 15 per centum of funds appropriated to the Administrator for environmental research and development for each activity listed in section 2(a) of this Act shall be obligated and expended for such long-term environmental research and development under this section.

(Pub.L. 96-569, §2(f), Dec. 22, 1980, 94 Stat. 3337.)

**§4363a.**

Pollution control technologies demonstrations

(1) The Administrator shall continue to be responsible for conducting and shall continue to conduct full-scale demonstrations of energy-related pollution control technologies as necessary in his judgment to fulfill the provisions of the Clean Air Act as amended [42 U.S.C. 7401 et seq.], the Federal Water Pollution Control Act as amended [33 U.S.C. 1251 et seq.], and other pertinent pollution control statutes.

(2) Energy-related environmental protection projects authorized to be administered by the Environmental Protection Agency under this Act shall not be transferred administratively to the Department of Energy or reduced through budget amendment. No action shall be taken through administrative or budgetary means to diminish the ability of the Environmental Protection Agency to initiate such projects.

(Pub.L. 96-229, §2(d), Apr. 7, 1980, 94 Stat. 325.)

**§4364.**

Expenditure of funds for research and development related to regulatory program activities

(a) Coordination, etc., with research needs and priorities of program offices and Environmental Protection Agency

The Administrator of the Environmental Protection Agency shall assure that the expenditure of any funds appropriated pursuant to this Act or any other provision of law for environmental research and development related to regulatory program activities shall be coordinated with and reflect the research needs and priorities of the program offices, as well as the overall research needs and priorities of the Agency, including those defined in the five-year research plan.

(b) Program offices subject to coverage

For purposes of subsection (a) of this section, the appropriate program offices are—

(1) the Office of Air and Waste Management, for air quality activities;

(2) the Office of Water and Hazardous Materials, for water quality activities and water supply activities;

(3) the Office of Pesticides, for environmental effects of pesticides;

(4) the Office of Solid Waste, for solid waste activities;

(5) the Office of Toxic Substances, for toxic substance activities;

(6) the Office of Radiation Programs, for radiation activities; and

(7) the Office of Noise Abatement and Control, for noise activities.

(c) Report to Congress; contents

The Administrator shall submit to the Presi-

**(g) Member committees and investigative panels; establishment; chairmanship**

The Board is authorized to constitute such member committees and investigative panels as the Administrator and the Board find necessary to carry out this section. Each such member committee or investigative panel shall be chaired by a member of the Board.

**(h) Appointment and compensation of secretary and other personnel; compensation of members**

(1) Upon the recommendation of the Board, the Administrator shall appoint a secretary, and such other employees as deemed necessary to exercise and fulfill the Board's powers and responsibilities. The compensation of all employees appointed under this paragraph shall be fixed in accordance with chapter 51 and subchapter III of chapter 53 of title 5.

(2) Members of the Board may be compensated at a rate to be fixed by the President but not in excess of the maximum rate of pay for grade GS-18, as provided in the General Schedule under section 5332 of title 5.

**(i) Consultation and coordination with Scientific Advisory Panel**

In carrying out the functions assigned by this section, the Board shall consult and coordinate its activities with the Scientific Advisory Panel established by the Administrator pursuant to section 136w(d) of title 7.

(Pub.L. 95-155, §8, Nov. 8, 1977, 91 Stat. 1260; H. Res. 549, Mar. 25, 1980; Pub.L. 96-569, §3, Dec. 22, 1980, 94 Stat. 3337.)

**§4366.**

**Identification and coordination of research, development, and demonstration activities**

**(a) Consultation and cooperation of Administrator of Environmental Protection Agency with heads of Federal agencies; inclusion of activities in annual revisions of plan for research, etc.**

The Administrator of the Environmental Protection Agency, in consultation and cooperation with the heads of other Federal agencies, shall take such actions on a continuing basis as may be necessary or appropriate—

(1) to identify environmental research, development, and demonstration activities, within and outside the Federal Government, which may need to be more effectively coordinated in order to minimize unnecessary duplication of programs, projects, and research facilities;

(2) to determine the steps which might be taken under existing law, by him and by the heads of such other agencies, to accomplish or promote such coordination, and to provide for or encourage the taking of such steps; and

(3) to determine the additional legislative actions which would be needed to assure such coordination to the maximum extent possible.

The Administrator shall include in each annual

revision of the five-year plan provided for by section 4361 of this title a full and complete report on the actions taken and determinations made during the preceding year under this subsection, and may submit interim reports on such actions and determinations at such other times as he deems appropriate.

**(b) Coordination of programs by Administrator**

The Administrator of the Environmental Protection Agency shall coordinate environmental research, development, and demonstration programs of such Agency with the heads of other Federal agencies in order to minimize unnecessary duplication of programs, projects, and research facilities.

**(c) Joint study by Council on Environmental Quality in consultation with Office of Science and Technology Policy for coordination of activities; report to President and Congress; report by President to Congress on implementation of joint study and report**

(1) In order to promote the coordination of environmental research and development activities, and to assure that the action taken and methods used (under subsection (a) of this section and otherwise) to bring about such coordination will be as effective as possible for that purpose, the Council on Environmental Quality in consultation with the Office of Science and Technology Policy shall promptly undertake and carry out a joint study of all aspects of the coordination of environmental research and development. The Chairman of the Council shall prepare a report on the results of such study, together with such recommendations (including legislative recommendations) as he deems appropriate, and shall submit such report to the President and the Congress not later than May 31, 1978.

(2) Not later than September 30, 1978, the President shall report to the Congress on steps he has taken to implement the recommendations included in the report under paragraph (1), including any recommendations he may have for legislation.

(Pub.L. 95-155, §9, Nov. 8, 1977, 91 Stat. 1261.)

**§4367.**

**Reporting requirements of financial interests of officers and employees of Environmental Protection Agency**

**(a) Covered officers and employees**

Each officer or employee of the Environmental Protection Agency who—

(1) performs any function or duty under this Act; and

(2) has any known financial interest in any person who applies for or receives grants, contracts, or other forms of financial assistance under this Act,

shall, beginning on February 1, 1978, annually file with the Administrator a written statement

agency concerned (including partial displacement through reduction of nonovertime hours, wages, or employment benefits);

(2) result in the employment of any individual when any other person is in a layoff status from the same or substantially equivalent job within the jurisdiction of the environmental agency concerned; or

(3) affect existing contracts for services.

**(c) Prior appropriation Acts**

Grants or agreements awarded under this section shall be subject to prior appropriation Acts.

(Pub.L. 98-313, §2, June 12, 1984, 98 Stat. 235.)

**SHORT TITLE**

Section 1 of Pub. L. 98-313 provided that: "This Act [enacting this section] may be cited as the 'Environmental Programs Assistance Act of 1984'."

**§4369.**

**Miscellaneous reports**

**(a) Availability to Congressional committees**

All reports to or by the Administrator relevant to the Agency's program of research, development, and demonstration shall promptly be made available to the Committee on Science and Technology of the House of Representatives and the Committee on Environment and Public Works of the Senate, unless otherwise prohibited by law.

**(b) Transmittal of jurisdictional information**

The Administrator shall keep the Committee on Science and Technology of the House of Representatives and the Committee on Environment and Public Works of the Senate fully and currently informed with respect to matters falling within or related to the jurisdiction of the committees.

**(c) Comment by Government agencies and the public**

The reports provided for in section 5910 of this title shall be made available to the public for comment, and to the heads of affected agencies for comment and, in the case of recommendations for action, for response.

**(d) Transmittal of research information to the Department of Energy**

For the purpose of assisting the Department of Energy in planning and assigning priorities in research development and demonstration activities related to environmental control technologies, the Administrator shall actively make available to the Department all information on research activities and results of research programs of the Environmental Protection Agency.

(Pub.L. 95-477, §5, Oct. 18, 1978, 92 Stat. 1510.)

**§4369a.**

**Reports on environmental research and development activities of the Agency**

**(a) Reports to keep Congressional committees fully and currently informed**

The Administrator shall keep the appropriate

committees of the House and the Senate fully and currently informed about all aspects of the environmental research and development activities of the Environmental Protection Agency.

**(b) Annual reports relating requested funds to activities to be carried out with those funds**

Each year, at the time of the submission of the President's annual budget request, the Administrator shall make available to the appropriate committees of Congress sufficient copies of a report fully describing funds requested and the environmental research and development activities to be carried out with these funds.

(Pub.L. 96-229, §4, Apr. 7, 1980, 94 Stat. 328.)

**§4370.**

**Reimbursement for use of facilities**

**(a) Authority to allow outside groups or individuals to use research and test facilities; reimbursement**

The Administrator is authorized to allow appropriate use of special Environmental Protection Agency research and test facilities by outside groups or individuals and to receive reimbursement or fees for costs incurred thereby when he finds this to be in the public interest. Such reimbursement or fees are to be used by the Agency to defray the costs of use by outside groups or individuals.

**(b) Rules and regulations**

The Administrator may promulgate regulations to cover such use of Agency facilities in accordance with generally accepted accounting, safety, and laboratory practices.

**(c) Waiver of reimbursement by Administrator**

When he finds it is in the public interest the Administrator may waive reimbursement or fees for outside use of Agency facilities by non-profit private or public entities.

(Pub.L. 96-229, §5, Apr. 7, 1980, 94 Stat. 328.)

**§4370a.**

**Assistant Administrators of Environmental Protection Agency; appointment; duties**

**(a) The President, by and with the advice and consent of the Senate, may appoint three Assistant Administrators of the Environmental Protection Agency in addition to—**

(1) the five Assistant Administrators provided for in section 1(d) of Reorganization Plan Numbered 3 of 1970 (5 U.S.C. Appendix);

(2) the Assistant Administrator provided by section 2625(g) of title 15; and

(3) the Assistant Administrator provided by section 6911a of this title.

**(b) Each Assistant Administrator appointed under subsection (a) of this section shall perform such duties as the Administrator of the Environmental Protection Agency may prescribe.**

(Pub.L. 98-80, §1, Aug. 23, 1983, 97 Stat. 485.)

**Appendix B**

**Council on Environmental Quality NEPA Regulations**

**40 C.F.R. Pts. 1500-1508**

**Copyright 1989 Environmental Law Institute.  
Reprinted with permission from the NEPA Deskbook.  
All rights reserved.**

# Council on Environmental Quality

## NEPA Regulations

### 40 C.F.R. Pts. 1500-1508

#### PART 1500—PURPOSE, POLICY, AND MANDATE

Sec.	
1500.1	Purpose.
1500.2	Policy.
1500.3	Mandate.
1500.4	Reducing paperwork.
1500.5	Reducing delay.
1500.6	Agency authority.

**Authority:** NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 et seq.), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609) and E.O. 11514, Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

**Source:** 43 FR 55990, Nov. 28, 1978, unless otherwise noted.

#### § 1500.1 Purpose.

(a) The National Environmental Policy Act (NEPA) is our basic national charter for protection of the environment. It establishes policy, sets goals (section 101), and provides means (section 102) for carrying out the policy. Section 102(2) contains "action-forcing" provisions to make sure that federal agencies act according to the letter and spirit of the Act. The regulations that follow implement section 102(2). Their purpose is to tell federal agencies what they must do to comply with the procedures and achieve the goals of the Act. The President, the federal agencies, and the courts share responsibility for enforcing the Act so as to achieve the substantive requirements of section 101.

(b) NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.

(c) Ultimately, of course, it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. These regulations provide the direction to achieve this purpose.

#### § 1500.2 Policy.

Federal agencies shall to the fullest extent possible:

(a) Interpret and administer the policies, regulations, and public laws of the United States in accordance with the policies set forth in the Act and in these regulations.

(b) Implement procedures to make the NEPA process more useful to decisionmakers and the public; to reduce paperwork and the accumulation of extraneous background data; and to emphasize real environmental issues and alternatives. Environmental impact statements shall be concise, clear, and to the point, and shall be supported by evidence that agencies have made the necessary environmental analyses.

(c) Integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively.

(d) Encourage and facilitate public involvement in decisions which affect the quality of the human environment.

(e) Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.

(f) Use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.

#### § 1500.3 Mandate.

Parts 1500 through 1508 of this title provide regulations applicable to and binding on all Federal agencies for implementing the procedural provisions of the National Environmental Policy Act of 1969, as amended (Pub. L. 91-190, 42 U.S.C. 4321 et seq.) (NEPA or the Act) except where compliance would be inconsistent with other statutory requirements. These regulations are issued pursuant to NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 et seq.) section 309 of the Clean Air Act, as amended (42 U.S.C. 7609) and Executive Order 11514, Protection and Enhancement of Environmental Quality (March 5, 1970, as amended by Executive Order 11991, May 24, 1977). These regulations, unlike the predecessor guidelines, are not confined to sec. 102(2)(C) (environmental impact statements). The regulations apply to the whole of section 102(2). The provisions of the Act and of these regulations must be read together as a whole in order to comply with the spirit and letter of the law. It is the Council's intention that judicial review of agency compliance with these regulations not occur before an agency has filed the final environmental impact statement, or has made a final finding of no significant impact (when such a finding

will result in action affecting the environment), or takes action that will result in irreparable injury. Furthermore, it is the Council's intention that any trivial violation of these regulations not give rise to any independent cause of action.

#### § 1500.4 Reducing paperwork.

Agencies shall reduce excessive paperwork by:

(a) Reducing the length of environmental impact statements (§ 1502.2(c)), by means such as setting appropriate page limits (§§ 1501.7(b)(1) and 1502.7).

(b) Preparing analytic rather than encyclopedic environmental impact statements (§ 1502.2(a)).

(c) Discussing only briefly issues other than significant ones (§ 1502.2(b)).

(d) Writing environmental impact statements in plain language (§ 1502.8).

(e) Following a clear format for environmental impact statements (§ 1502.10).

(f) Emphasizing the portions of the environmental impact statement that are useful to decisionmakers and the public (§§ 1502.14 and 1502.15) and reducing emphasis on background material (§ 1502.16).

(g) Using the scoping process, not only to identify significant environmental issues deserving of study, but also to deemphasize insignificant issues, narrowing the scope of the environmental impact statement process accordingly (§ 1501.7).

(h) Summarizing the environmental impact statement (§ 1502.12) and circulating the summary instead of the entire environmental impact statement if the latter is unusually long (§ 1502.19).

(i) Using program, policy, or plan environmental impact statements and tiering from statements of broad scope to those of narrower scope, to eliminate repetitive discussions of the same issues (§§ 1502.4 and 1502.20).

(j) Incorporating by reference (§ 1502.21).

(k) Integrating NEPA requirements with other environmental review and consultation requirements (§ 1502.25).

(l) Requiring comments to be as specific as possible (§ 1503.3).

(m) Attaching and circulating only changes to the draft environmental impact statement, rather than rewriting and circulating the entire statement when changes are minor (§ 1503.4(c)).

(n) Eliminating duplication with State and local procedures, by providing for joint preparation (§ 1506.2), and with other Federal procedures, by providing that an agency may adopt appropriate environmental documents prepared by another agency (§ 1506.3).

(o) Combining environmental docu-



(e) Prepare a finding of no significant impact (§ 1508.13), if the agency determines on the basis of the environmental assessment not to prepare a statement.

(1) The agency shall make the finding of no significant impact available to the affected public as specified in § 1506.6.

(2) In certain limited circumstances, which the agency may cover in its procedures under § 1507.3, the agency shall make the finding of no significant impact available for public review (including State and areawide clearinghouses) for 30 days before the agency makes its final determination whether to prepare an environmental impact statement and before the action may begin. The circumstances are:

(i) The proposed action is, or is closely similar to, one which normally requires the preparation of an environmental impact statement under the procedures adopted by the agency pursuant to § 1507.3, or

(ii) The nature of the proposed action is one without precedent.

#### § 1501.5 Lead agencies.

(a) A lead agency shall supervise the preparation of an environmental impact statement if more than one Federal agency either:

(1) Proposes or is involved in the same action; or

(2) Is involved in a group of actions directly related to each other because of their functional interdependence or geographical proximity.

(b) Federal, State, or local agencies, including at least one Federal agency, may act as joint lead agencies to prepare an environmental impact statement (§ 1506.2).

(c) If an action falls within the provisions of paragraph (a) of this section the potential lead agencies shall determine by letter or memorandum which agency shall be the lead agency and which shall be cooperating agencies. The agencies shall resolve the lead agency question so as not to cause delay. If there is disagreement among the agencies, the following factors (which are listed in order of descending importance) shall determine lead agency designation:

(1) Magnitude of agency's involvement.

(2) Project approval/disapproval authority.

(3) Expertise concerning the action's environmental effects.

(4) Location of agency's involvement.

(5) Sequence of agency's involvement.

(d) Any Federal agency, or any State or local agency or private person substantially affected by the absence of lead agency designation, may make a written request to the potential lead agencies that a lead agency be designated.

(e) If Federal agencies are unable to agree on which agency will be the lead agency or if the procedure described in

paragraph (c) of this section has not resulted within 45 days in a lead agency designation, any of the agencies or persons concerned may file a request with the Council asking it to determine which Federal agency shall be the lead agency.

A copy of the request shall be transmitted to each potential lead agency. The request shall consist of:

(1) A precise description of the nature and extent of the proposed action.

(2) A detailed statement of why each potential lead agency should or should not be the lead agency under the criteria specified in paragraph (c) of this section.

(f) A response may be filed by any potential lead agency concerned within 20 days after a request is filed with the Council. The Council shall determine as soon as possible but not later than 20 days after receiving the request and all responses to it which Federal agency shall be the lead agency and which other Federal agencies shall be cooperating agencies.

[43 FR 55992, Nov. 29, 1978; 44 FR 873, Jan. 3, 1979]

#### § 1501.6 Cooperating agencies.

The purpose of this section is to emphasize agency cooperation early in the NEPA process. Upon request of the lead agency, any other Federal agency which has jurisdiction by law shall be a cooperating agency. In addition any other Federal agency which has special expertise with respect to any environmental issue, which should be addressed in the statement may be a cooperating agency upon request of the lead agency. An agency may request the lead agency to designate it a cooperating agency.

(a) The lead agency shall:

(1) Request the participation of each cooperating agency in the NEPA process at the earliest possible time.

(2) Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible consistent with its responsibility as lead agency.

(3) Meet with a cooperating agency at the latter's request.

(b) Each cooperating agency shall:

(1) Participate in the NEPA process at the earliest possible time.

(2) Participate in the scoping process (described below in § 1501.7).

(3) Assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the *environmental impact statement* concerning which the cooperating agency has special expertise.

(4) Make available staff support at the lead agency's request to enhance the latter's interdisciplinary capability.

(5) Normally use its own funds. The lead agency shall, to the extent available funds permit, fund those major activities or analyses it requests from cooperating agencies. Potential lead

agencies shall include such funding requirements in their budget requests.

(c) A cooperating agency may in response to a lead agency's request for assistance in preparing the environmental impact statement (described in paragraph (b)(3), (4), or (5) of this section) reply that other program commitments preclude any involvement or the degree of involvement requested in the action that is the subject of the environmental impact statement. A copy of this reply shall be submitted to the Council.

#### § 1501.7 Scoping.

There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This process shall be termed scoping. As soon as practicable after its decision to prepare an environmental impact statement and before the scoping process the lead agency shall publish a notice of intent (§ 1508.22) in the *FEDERAL REGISTER* except as provided in § 1507.3(e).

(a) As part of the scoping process the lead agency shall:

(1) Invite the participation of affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds), unless there is a limited exception under § 1507.3(c). An agency may give notice in accordance with § 1506.6.

(2) Determine the scope (§ 1508.25) and the significant issues to be analyzed in depth in the environmental impact statement.

(3) Identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (§ 1506.3), narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere.

(4) Allocate assignments for preparation of the environmental impact statement among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement.

(5) Indicate any public environmental assessments and other environmental impact statements which are being or will be prepared that are related to but are not part of the scope of the impact statement under consideration.

(6) Identify other environmental *review and consultation requirements* so the lead and cooperating agencies may prepare other required analyses and studies concurrently with, and integrated with, the environmental impact statement as provided in § 1502.25.

(7) Indicate the relationship between the timing of the preparation of environmental analyses and the agency's tentative planning and decisionmaking schedule.

(b) Environmental impact statements may be prepared, and are sometimes required, for broad Federal actions such as the adoption of new agency programs or regulations (§ 1508.18). Agencies shall prepare statements on broad actions so that they are relevant to policy and are timed to coincide with meaningful points in agency planning and decisionmaking.

(c) When preparing statements on broad actions (including proposals by more than one agency), agencies may find it useful to evaluate the proposal(s) in one of the following ways:

(1) Geographically, including actions occurring in the same general location, such as body of water, region, or metropolitan area.

(2) Generically, including actions which have relevant similarities, such as common timing, impacts, alternatives, methods of implementation, media, or subject matter.

(3) By stage of technological development including federal or federally assisted research, development or demonstration programs for new technologies which, if applied, could significantly affect the quality of the human environment. Statements shall be prepared on such programs and shall be available before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives.

(d) Agencies shall as appropriate employ scoping (§ 1501.7), tiering (§ 1502.20), and other methods listed in §§ 1500.4 and 1500.5 to relate broad and narrow actions and to avoid duplication and delay.

#### § 1502.5 Timing.

An agency shall commence preparation of an environmental impact statement as close as possible to the time the agency is developing or is presented with a proposal (§ 1508.23) so that preparation can be completed in time for the final statement to be included in any recommendation or report on the proposal. The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made (§§ 1500.2(c), 1501.2, and 1502.2). For instance:

(a) For projects directly undertaken by Federal agencies the environmental impact statement shall be prepared at the feasibility analysis (go-no go) stage and may be supplemented at a later stage if necessary.

(b) For applications to the agency appropriate environmental assessments or statements shall be commenced no later than immediately after the application is received. Federal agencies are encouraged to begin preparation of such assessments or statements earlier, preferably jointly with applicable State or local agencies.

(c) For adjudication, the final environmental impact statement shall nor-

mally precede the final staff recommendation and that portion of the public hearing related to the impact study. In appropriate circumstances the statement may follow preliminary hearings designed to gather information for use in the statements.

(d) For informal rulemaking the draft environmental impact statement shall normally accompany the proposed rule.

#### § 1502.6 Interdisciplinary preparation.

Environmental impact statements shall be prepared using an interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts (section 102(2)(A) of the Act). The disciplines of the preparers shall be appropriate to the scope and issues identified in the scoping process (§ 1501.7).

#### § 1502.7 Page limits.

The text of final environmental impact statements (e.g., paragraphs (d) through (g) of § 1502.19) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages.

#### § 1502.8 Writing.

Environmental impact statements shall be written in plain language and may use appropriate graphics so that decisionmakers and the public can readily understand them. Agencies should employ writers of clear prose or editors to write, review, or edit statements, which will be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts.

#### § 1502.9 Draft, final, and supplemental statements.

Except for proposals for legislation as provided in § 1508.8 environmental impact statements shall be prepared in two stages and may be supplemented.

(a) Draft environmental impact statements shall be prepared in accordance with the scope decided upon in the scoping process. The lead agency shall work with the cooperating agencies and shall obtain comments as required in Part 1503 of this chapter. The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action.

(b) Final environmental impact statements shall respond to comments as required in Part 1503 of this chapter. The agency shall discuss at appropriate points in the final statement

any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised.

#### (c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

(2) May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

(3) Shall adopt procedures for introducing a supplement into its formal administrative record, if such a record exists.

(4) Shall prepare, circulate, and file a supplement to a statement in the same fashion (exclusive of scoping) as a draft and final statement unless alternative procedures are approved by the Council.

#### § 1502.10 Recommended format.

Agencies shall use a format for environmental impact statements which will encourage good analysis and clear presentation of the alternatives including the proposed action. The following standard format for environmental impact statements should be followed unless the agency determines that there is a compelling reason to do otherwise:

(a) Cover sheet.

(b) Summary.

(c) Table of contents.

(d) Purpose of and need for action.

(e) Alternatives, including proposed action (sections 102(2)(C)(iii) and 102(2)(E) of the Act).

(f) Affected environment.

(g) Environmental consequences (especially sections 102(2)(C)(i), (ii), (iv), and (v) of the Act).

(h) List of preparers.

(i) List of Agencies, Organizations, and persons to whom copies of the statement are sent.

(j) Index.

(k) Appendices (if any).

If a different format is used, it shall include paragraphs (a), (b), (c), (h), (i), and (j), of this section and shall include the substance of paragraphs (d), (e), (f), (g), and (k) of this section, as further described in §§ 1502.11 through 1502.18, in any appropriate format.

#### § 1502.11 Cover sheet.

The cover sheet shall not exceed one page. It shall include:

(a) A list of the responsible agencies including the lead agency and any cooperating agencies.

(b) The title of the proposed action that is the subject of the statement (and if appropriate the titles of related

same issues and to focus on the actual issues ripe for decision at each level of environmental review (§ 1508.28). Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available. Tiering may also be appropriate for different stages of actions. (Section 1508.28).

#### § 1502.21 Incorporation by reference.

Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action. The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference.

#### § 1502.22 Incomplete or unavailable information.

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

(a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environ-

ment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

(c) The amended regulation will be applicable to all environmental impact statements for which a Notice of Intent (40 CFR 1508.22) is published in the FEDERAL REGISTER on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

[51 FR 15625, Apr. 25, 1986]

#### § 1502.23 Cost-benefit analysis.

If a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed action, it shall be incorporated by reference or appended to the statement as an aid in evaluating the environmental consequences. To assess the adequacy of compliance with section 102(2)(B) of the Act the statement shall, when a cost-benefit analysis is prepared, discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values, and amenities. For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations. In any event, an environmental impact statement should at least indicate those considerations, including factors not related to environmental quality, which are likely to be relevant and important to a decision.

#### § 1502.24 Methodology and scientific accuracy.

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

#### § 1502.25 Environmental review and consultation requirements.

(a) To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*), the National Historic Preservation Act of 1966 (16 U.S.C. 470 *et seq.*), the Endangered

Species Act of 1973 (16 U.S.C. 1531 *et seq.*), and other environmental review laws and executive orders.

(b) The draft environmental impact statement shall list all Federal permits, licenses, and other entitlements which must be obtained in implementing the proposal. If it is uncertain whether a Federal permit, license, or other entitlement is necessary, the draft environmental impact statement shall so indicate.

### PART 1503—COMMENTING

Sec.

1503.1 Inviting comments.

1503.2 Duty to comment.

1503.3 Specificity of comments.

1503.4 Response to comments.

**AUTHORITY:** NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

**SOURCE:** 43 FR 55997, Nov. 29, 1978, unless otherwise noted.

#### § 1503.1 Inviting comments.

(a) After preparing a draft environmental impact statement and before preparing a final environmental impact statement the agency shall:

(1) Obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved or which is authorized to develop and enforce environmental standards.

(2) Request the comments of:

(i) Appropriate State and local agencies which are authorized to develop and enforce environmental standards;

(ii) Indian tribes, when the effects may be on a reservation; and

(iii) Any agency which has requested that it receive statements on actions of the kind proposed.

Office of Management and Budget Circular A-95 (Revised), through its system of clearinghouses, provides a means of securing the views of State and local environmental agencies. The clearinghouses may be used, by mutual agreement of the lead agency and the clearinghouse, for securing State and local reviews of the draft environmental impact statements.

(3) Request comments from the applicant, if any.

(4) Request comments from the public, affirmatively soliciting comments from those persons or organizations who may be interested or affected.

(b) An agency may request comment on a final environmental impact statement before the decision is finally made. In any case other agencies or persons may make comments before the final decision unless a different time is provided under § 1506.10.

#### § 1503.2 Duty to comment.

Federal agencies with jurisdiction by law or special expertise with respect to any environmental impact involved

ommendations as to what mitigation alternative, further study, or other course of action (including abandonment of the matter) are necessary to remedy the situation.

(d) Not later than twenty-five (25) days after the referral to the Council the lead agency may deliver a response to the Council, and the referring agency. If the lead agency requests more time and gives assurance that the matter will not go forward in the interim, the Council may grant an extension. The response shall:

(1) Address fully the issues raised in the referral.

(2) Be supported by evidence.

(3) Give the lead agency's response to the referring agency's recommendations.

(e) Interested persons (including the applicant) may deliver their views in writing to the Council. Views in support of the referral should be delivered not later than the referral. Views in support of the response shall be delivered not later than the response.

(f) Not later than twenty-five (25) days after receipt of both the referral and any response or upon being informed that there will be no response (unless the lead agency agrees to a longer time), the Council may take one or more of the following actions:

(1) Conclude that the process of referral and response has successfully resolved the problem.

(2) Initiate discussions with the agencies with the objective of mediation with referring and lead agencies.

(3) Hold public meetings or hearings to obtain additional views and information.

(4) Determine that the issue is not one of national importance and request the referring and lead agencies to pursue their decision process.

(5) Determine that the issue should be further negotiated by the referring and lead agencies and is not appropriate for Council consideration until one or more heads of agencies report to the Council that the agencies' disagreements are irreconcilable.

(6) Publish its findings and recommendations (including where appropriate a finding that the submitted evidence does not support the position of an agency).

(7) When appropriate, submit the referral and the response together with the Council's recommendation to the President for action.

(g) The Council shall take no longer than 60 days to complete the actions specified in paragraph (f)(2), (3), or (5) of this section.

(h) When the referral involves an action required by statute to be determined on the record after opportunity for agency hearing, the referral shall be conducted in a manner consistent with 5 U.S.C. 557(d) (Administrative Procedure Act).

[43 FR 55998, Nov. 29, 1978; 44 FR 873, Jan. 3, 1979]

## PART 1505—NEPA AND AGENCY DECISIONMAKING

Sec.

- 1505.1 Agency decisionmaking procedures.  
1505.2 Record of decision in cases requiring environmental impact statements.  
1505.3 Implementing the decision.

**AUTHORITY:** NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

**SOURCE:** 43 FR 55999, Nov. 29, 1978, unless otherwise noted.

### § 1505.1 Agency decisionmaking procedures.

Agencies shall adopt procedures (§ 1507.3) to ensure that decisions are made in accordance with the policies and purposes of the Act. Such procedures shall include but not be limited to:

(a) Implementing procedures under section 102(2) to achieve the requirements of sections 101 and 102(1).

(b) Designating the major decision points for the agency's principal programs likely to have a significant effect on the human environment and assuring that the NEPA process corresponds with them.

(c) Requiring that relevant environmental documents, comments, and responses be part of the record in formal rulemaking or adjudicatory proceedings.

(d) Requiring that relevant environmental documents, comments, and responses accompany the proposal through existing agency review processes so that agency officials use the statement in making decisions.

(e) Requiring that the alternatives considered by the decisionmaker are encompassed by the range of alternatives discussed in the relevant environmental documents and that the decisionmaker consider the alternatives described in the environmental impact statement. If another decision document accompanies the relevant environmental documents to the decisionmaker, agencies are encouraged to make available to the public before the decision is made any part of that document that relates to the comparison of alternatives.

### § 1505.2 Record of decision in cases requiring environmental impact statements.

At the time of its decision (§ 1506.10) or, if appropriate, its recommendation to Congress, each agency shall prepare a concise public record of decision. The record, which may be integrated into any other record prepared by the agency, including that required by OMB Circular A-95 (Revised), part I, sections 6(c) and (d), and Part II, section 5(b)(4), shall:

(a) State what the decision was.

(b) Identify all alternatives considered by the agency in reaching its decision, specifying the alternative or alternatives which were considered to be environmentally preferable. An

agency may discuss preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions. An agency shall identify and discuss all such factors including any essential considerations of national policy which were balanced by the agency in making its decision and state how those considerations entered into its decision.

(c) State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.

### § 1505.3 Implementing the decision.

Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. Mitigation (§ 1505.2(c)) and other conditions established in the environmental impact statement or during its review and committed as part of the decision shall be implemented by the lead agency or other appropriate consenting agency. The lead agency shall:

(a) Include appropriate conditions in grants, permits or other approvals.

(b) Condition funding of actions on mitigation.

(c) Upon request, inform cooperating or commenting agencies on progress in carrying out mitigation measures which they have proposed and which were adopted by the agency making the decision.

(d) Upon request, make available to the public the results of relevant monitoring.

## PART 1506—OTHER REQUIREMENTS OF NEPA

Sec.

- 1506.1 Limitations on actions during NEPA process.  
1506.2 Elimination of duplication with State and local procedures.  
1506.3 Adoption.  
1506.4 Combining documents.  
1506.5 Agency responsibility.  
1506.6 Public involvement.  
1506.7 Further guidance.  
1506.8 Proposals for legislation.  
1506.9 Filing requirements.  
1506.10 Timing of agency action.  
1506.11 Emergencies.  
1506.12 Effective date.

**AUTHORITY:** NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

**SOURCE:** 43 FR 56000, Nov. 29, 1978, unless otherwise noted.

### § 1506.1 Limitations on actions during NEPA process.

(a) Until an agency issues a record of decision as provided in § 1505.2 (except as provided in paragraph (c) of this

ganizations who have requested that notice regularly be provided. Agencies shall maintain a list of such organizations.

(3) In the case of an action with effects primarily of local concern the notice may include:

(i) Notice to State and areawide clearinghouses pursuant to OMB Circular A-95 (Revised).

(ii) Notice to Indian tribes when effects may occur on reservations.

(iii) Following the affected State's public notice procedures for comparable actions.

(iv) Publication in local newspapers (in papers of general circulation rather than legal papers).

(v) Notice through other local media.

(vi) Notice to potentially interested community organizations including small business associations.

(vii) Publication in newsletters that may be expected to reach potentially interested persons.

(viii) Direct mailing to owners and occupants of nearby or affected property.

(ix) Posting of notice on and off site in the area where the action is to be located.

(c) Hold or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency. Criteria shall include whether there is:

(1) Substantial environmental controversy concerning the proposed action or substantial interest in holding the hearing.

(2) A request for a hearing by another agency with jurisdiction over the action supported by reasons why a hearing will be helpful. If a draft environmental impact statement is to be considered at a public hearing, the agency should make the statement available to the public at least 15 days in advance (unless the purpose of the hearing is to provide information for the draft environmental impact statement).

(d) Solicit appropriate information from the public.

(e) Explain in its procedures where interested persons can get information or status reports on environmental impact statements and other elements of the NEPA process.

(f) Make environmental impact statements, the comments received, and any underlying documents available to the public pursuant to the provisions of the Freedom of Information Act (5 U.S.C. 552), without regard to the exclusion for interagency memoranda where such memoranda transmit comments of Federal agencies on the environmental impact of the proposed action. Materials to be made available to the public shall be provided to the public without charge to the extent practicable, or at a fee which is not more than the actual costs of reproducing copies required to be sent to other Federal agencies, including the Council.

#### § 1506.7 Further guidance.

The Council may provide further guidance concerning NEPA and its procedures including:

(a) A handbook which the Council may supplement from time to time, which shall in plain language provide guidance and instructions concerning the application of NEPA and these regulations.

(b) Publication of the Council's Memoranda to Heads of Agencies.

(c) In conjunction with the Environmental Protection Agency and the publication of the 102 Monitor, notice of:

- (1) Research activities;
- (2) Meetings and conferences related to NEPA; and
- (3) Successful and innovative procedures used by agencies to implement NEPA.

#### § 1506.8 Proposals for legislation.

(a) The NEPA process for proposals for legislation (§ 1508.17) significantly affecting the quality of the human environment shall be integrated with the legislative process of the Congress. A legislative environmental impact statement is the detailed statement required by law to be included in a recommendation or report on a legislative proposal to Congress. A legislative environmental impact statement shall be considered part of the formal transmittal of a legislative proposal to Congress; however, it may be transmitted to Congress up to 30 days later in order to allow time for completion of an accurate statement which can serve as the basis for public and Congressional debate. The statement must be available in time for Congressional hearings and deliberations.

(b) Preparation of a legislative environmental impact statement shall conform to the requirements of these regulations except as follows:

(1) There need not be a scoping process.

(2) The legislative statement shall be prepared in the same manner as a draft statement, but shall be considered the "detailed statement" required by statute; *Provided*, That when any of the following conditions exist both the draft and final environmental impact statement on the legislative proposal shall be prepared and circulated as provided by §§ 1503.1 and 1506.10.

(i) A Congressional Committee with jurisdiction over the proposal has a rule requiring both draft and final environmental impact statements.

(ii) The proposal results from a study process required by statute (such as those required by the Wild and Scenic Rivers Act (16 U.S.C. 1271 *et seq.*) and the Wilderness Act (16 U.S.C. 1131 *et seq.*)).

(iii) Legislative approval is sought for Federal or federally assisted construction or other projects which the agency recommends be located at specific geographic locations. For proposals requiring an environmental impact statement for the acquisition of space

by the General Services Administration, a draft statement shall accompany the Prospectus or the 11(b) Report of Building Project Surveys to the Congress, and a final statement shall be completed before site acquisition.

(iv) The agency decides to prepare draft and final statements.

(c) Comments on the legislative statement shall be given to the lead agency which shall forward them along with its own responses to the Congressional committees with jurisdiction.

#### § 1506.9 Filing requirements.

Environmental impact statements together with comments and responses shall be filed with the Environmental Protection Agency, attention Office of Federal Activities (A-104), 401 M Street SW., Washington, DC 20460. Statements shall be filed with EPA no earlier than they are also transmitted to commenting agencies and made available to the public. EPA shall deliver one copy of each statement to the Council, which shall satisfy the requirement of availability to the President. EPA may issue guidelines to agencies to implement its responsibilities under this section and § 1506.10.

#### § 1506.10 Timing of agency action.

(a) The Environmental Protection Agency shall publish a notice in the *Federal Register* each week of the environmental impact statements filed during the preceding week. The minimum time periods set forth in this section shall be calculated from the date of publication of this notice.

(b) No decision on the proposed action shall be made or recorded under § 1505.2 by a Federal agency until the later of the following dates:

(1) Ninety (90) days after publication of the notice described above in paragraph (a) of this section for a draft environmental impact statement.

(2) Thirty (30) days after publication of the notice described above in paragraph (a) of this section for a final environmental impact statement.

An exception to the rules on timing may be made in the case of an agency decision which is subject to a formal internal appeal. Some agencies have a formally established appeal process which allows other agencies or the public to take appeals on a decision and make their views known, after publication of the final environmental impact statement. In such cases, where a real opportunity exists to alter the decision, the decision may be made and recorded at the same time the environmental impact statement is published. This means that the period for appeal of the decision and the 30-day period prescribed in paragraph (b)(2) of this section may run concurrently. In such cases the environmental impact statement shall explain the timing and the public's right of appeal. An agency engaged in rule-making under the Administrative Procedure Act or other statute for the purpose of protecting the public

specifically authorized under criteria established by an Executive Order or statute to be kept secret in the interest of national defense or foreign policy and are in fact properly classified pursuant to such Executive Order or statute. Environmental assessments and environmental impact statements which address classified proposals may be safeguarded and restricted from public dissemination in accordance with agencies' own regulations applicable to classified information. These documents may be organized so that classified portions can be included as annexes, in order that the unclassified portions can be made available to the public.

(d) Agency procedures may provide for periods of time other than those presented in § 1506.10 when necessary to comply with other specific statutory requirements.

(e) Agency procedures may provide that where there is a lengthy period between the agency's decision to prepare an environmental impact statement and the time of actual preparation, the notice of intent required by § 1501.7 may be published at a reasonable time in advance of preparation of the draft statement.

**PART 1508—TERMINOLOGY AND INDEX**

Sec.	
1508.1	Terminology.
1508.2	Act.
1508.3	Affecting.
1508.4	Categorical exclusion.
1508.5	Cooperating agency.
1508.6	Council.
1508.7	Cumulative impact.
1508.8	Effects.
1508.9	Environmental assessment.
1508.10	Environmental document.
1508.11	Environmental impact statement.
1508.12	Federal agency.
1508.13	Finding of no significant impact.
1508.14	Human environment.
1508.15	Jurisdiction by law.
1508.16	Lead agency.
1508.17	Legislation.
1508.18	Major Federal action.
1508.19	Matter.
1508.20	Mitigation.
1508.21	NEPA process.
1508.22	Notice of intent.
1508.23	Proposal.
1508.24	Referring agency.
1508.25	Scope.
1508.26	Special expertise.
1508.27	Significantly.
1508.28	Tiering.

**AUTHORITY:** NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

**SOURCE:** 43 FR 56003, Nov. 29, 1978, unless otherwise noted.

**§ 1508.1 Terminology.**

The terminology of this part shall be uniform throughout the Federal Government.

**§ 1508.2 Act.**

"Act" means the National Environmental Policy Act, as amended (42

U.S.C. 4321, *et seq.*) which is also referred to as "NEPA."

**§ 1508.3 Affecting.**

"Affecting" means will or may have an effect on.

**§ 1508.4 Categorical exclusion.**

"Categorical exclusion" means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (§ 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in § 1508.9 even though it is not required to do so. Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.

**§ 1508.5 Cooperating agency.**

"Cooperating agency" means any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. The selection and responsibilities of a cooperating agency are described in § 1501.6. A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency.

**§ 1508.6 Council.**

"Council" means the Council on Environmental Quality established by Title II of the Act.

**§ 1508.7 Cumulative impact.**

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**§ 1508.8 Effects.**

"Effects" include:

(a) Direct effects, which are caused by the action and occur at the same time and place.

(b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to in-

duced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

**§ 1508.9 Environmental assessment.**

"Environmental assessment":

(a) Means a concise public document for which a Federal agency is responsible that serves to:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

(2) Aid an agency's compliance with the Act when no environmental impact statement is necessary.

(3) Facilitate preparation of a statement when one is necessary.

(b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

**§ 1508.10 Environmental document.**

"Environmental document" includes the documents specified in § 1508.9 (environmental assessment), § 1508.11 (environmental impact statement), § 1508.13 (finding of no significant impact), and § 1508.22 (notice of intent).

**§ 1508.11 Environmental impact statement.**

"Environmental impact statement" means a detailed written statement as required by section 102(2)(C) of the Act.

**§ 1508.12 Federal agency.**

"Federal agency" means all agencies of the Federal Government. It does not mean the Congress, the Judiciary, or the President, including the performance of staff functions for the President in his Executive Office. It also includes for purposes of these regulations States and units of general local government and Indian tribes assuming NEPA responsibilities under section 104(h) of the Housing and Community Development Act of 1974.

**§ 1508.13 Finding of no significant impact.**

"Finding of no significant impact" means a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (§ 1508.4), will not have a significant effect on the human environment and



(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.

(b) Alternatives, which include: (1) No action alternative.

(2) Other reasonable courses of actions.

(3) Mitigation measures (not in the proposed action).

(c) Impacts, which may be: (1) Direct; (2) indirect; (3) cumulative.

§ 1508.26 Special expertise.

"Special expertise" means statutory responsibility, agency mission, or related program experience.

§ 1508.27 Significantly.

"Significantly" as used in NEPA requires considerations of both context and intensity:

(a) *Context.* This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) *Intensity.* This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

(2) The degree to which the proposed action affects public health or safety.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

143 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979]

§ 1508.28 Tiering.

"Tiering" refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

(a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.

(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

Index to Parts 1500 Through 1508

Action	1508.2
Action-forcing	1508.18, 1508.25
Adoption	1500.1, 1502.1
Affected Environment	1500.4(n), 1500.5(h), 1506.3
Affecting	1502.10(f), 1502.15
Agency Authority	1502.3, 1508.3
Agency Capability	1500.6
Agency Compliance	1501.2(a), 1507.2
Agency Procedures	1507.1
Agency Responsibility	1505.1, 1507.3
	1508.5

Alternatives	1501.2(c), 1502.2, 1502.10(e), 1502.14, 1505.1(e), 1505.2, 1507.2(f), 1508.25(b)
Appendices	1502.10(h), 1502.18, 1502.24
Applicant	1501.2(a)(1), 1501.4(b), 1501.9(a), 1502.19(b), 1503.1(a)(3), 1504.3(a), 1506.1(d), 1506.5(a), 1506.5(b)
Apply NEPA Early in the Process	1501.2
Categorical Exclusion	1500.4(p), 1500.5(h), 1501.4(a), 1507.3(b), 1508.4
Circulating of Environmental Impact Statement	1502.19, 1508.3
Classified Information	1507.3(c)
Clean Air Act	1504.1, 1508.19(a)
Combining Documents	1500.4(o), 1500.5(i), 1506.4
Commenting	1502.19, 1503.1, 1503.2, 1503.3, 1503.4, 1506.6(f)
Consultation Requirement	1500.4(k), 1500.5(g), 1501.7(a)(6), 1502.25
Context	1508.27(a)
Cooperating Agency	1500.5(b), 1501.1(b), 1501.5(c), 1501.5(f), 1501.6, 1503.1(a)(1), 1503.2, 1503.3, 1506.3(c), 1506.5(a), 1508.5
Cost-Benefit	1502.23
Council on Environmental Quality	1500.3, 1501.5(e), 1501.5(f), 1501.6(c), 1502.9(c)(4), 1504.1, 1504.2, 1504.3, 1508.6(f), 1508.9, 1508.10(e), 1508.11, 1507.3, 1508.6, 1508.24
Cover Sheet	1502.10(a), 1502.11
Cumulative Impact	1508.7, 1508.25(a), 1508.25(c)
Decisionmaking	1505.1, 1508.1
Decision points	1505.1(b)
Dependent	1508.25(a)
Draft Environmental Impact Statement	1502.9(a)
Early Application of NEPA	1501.2
Economic Effects	1508.8
Effective Date	1508.12
Effects	1502.16, 1508.8
Emergencies	1508.11
Endangered Species Act	1502.25, 1508.27(b)(9)
Energy	1502.10(e)
Environmental Assessment	1501.3, 1501.4(b), 1501.4(c), 1501.7(b)(3), 1506.2(b)(4), 1506.5(b), 1508.4, 1508.9, 1508.10, 1508.13, 1502.10(g), 1502.16
Environmental Consequences	1502.10(g), 1502.16
Environmental Consultation Requirements	1500.4(k), 1500.5(g), 1501.7(a)(6), 1502.25, 1503.3(c)
Environmental Documents	1508.10
Environmental Impact Statement	1500.4, 1501.4(c), 1501.7, 1501.3, 1502.1, 1502.2, 1502.3, 1502.4, 1502.5, 1502.6, 1502.7, 1502.8, 1502.9, 1502.10, 1502.11, 1502.12, 1502.13, 1502.14, 1502.15, 1502.16, 1502.17, 1502.18, 1502.19, 1502.20, 1502.21, 1502.22, 1502.23, 1502.24, 1502.25, 1506.2(b)(4), 1506.3, 1508.8, 1508.11
Environmental Protection Agency	1502.11(f), 1504.1, 1504.3, 1506.7(c), 1506.9, 1506.10, 1508.19(a)
Environmental Review Requirements	1500.4(k), 1500.5(g), 1501.7(a)(6), 1502.25, 1503.3(c)
Expedite	1501.8(b)(2)
Federal Agency	1508.12
Filing	1506.9
Final Environmental Impact Statement	1502.9(b), 1503.1, 1503.4(b)
Finding of No Significant Impact	1500.3, 1500.4(q), 1500.5(i), 1501.4(e), 1508.13
Fish and Wildlife Coordination Act	1502.25
Format for Environmental Impact Statement	1502.10
Freedom of Information Act	1506.6(f)
Further Guidance	1506.7
Generic	1502.4(c)(2)
General Services Administration	1508.8(b)(5)
Geographic	1502.4(c)(1)
Graphics	1502.8
Handbook	1506.7(a)
Housing and Community Development Act	1506.12, 1508.12
Human Environment	1502.3, 1502.22, 1508.14

Appendix C

Memorandum: Scoping Guidance

(Council on Environmental Quality April 30, 1981)

*Copyright 1989 Environmental Law Institute.*  
Reprinted with permission from the NEPA Deskbook.  
All rights reserved.



# Memorandum: Scoping Guidance

(Council on Environmental Quality Apr. 30, 1981)

## I. Introduction

### A. Background of this document

In 1978, with the publication of the proposed NEPA regulations (since adopted as formal rules, 40 C.F.R. Parts 1500-1508), the Council on Environmental Quality gave formal recognition to an increasingly used term—scoping. Scoping is an idea that has long been familiar to those involved in NEPA compliance: In order to manage effectively the preparation of an environmental impact statement (EIS), one must determine the scope of the document—that is, what will be covered, and in what detail. Planning of this kind was a normal component of EIS preparation. But the consideration of issues and choice of alternatives to be examined was in too many cases completed outside of public view. The innovative approach to scoping in the regulations is that the process is open to the public and state and local governments, as well as to affected federal agencies. This open process gives rise to important new opportunities for better and more efficient NEPA analyses, and simultaneously places new responsibilities on public and agency participants alike to surface their concerns early. Scoping helps insure that real problems are identified early and properly studied; that issues that are of no concern do not consume time and effort; that the draft statement when first made public is balanced and thorough; and that the delays occasioned by re-doing an inadequate draft are avoided. Scoping does not create problems that did not already exist; it ensures that problems that would have been raised anyway are identified early in the process.

Many members of the public as well as agency staffs engaged in the NEPA process have told the Council that the open scoping requirement is one of the most far-reaching changes engendered by the NEPA regulations. They have predicted that scoping could have a profound positive effect on environmental analyses, on the impact statement process itself, and ultimately on decisionmaking.

Because the concept of open scoping was new, the Council decided to encourage agencies' innovation without unduly restrictive guidance. Thus the regulations relating to scoping are very simple. They state that "there shall be an early and open process for determining the scope of issues to be addressed" which "shall be termed scoping," but they lay down few specific requirements. (Section 1501.7<sup>\*</sup>). They require an open process with public notice; identification of significant and insignificant issues; allocation of EIS preparation assignments; identification of related analysis requirements in order to avoid duplication of work; and the planning of a schedule for EIS preparation that meshes with the agency's decisionmaking schedule. (Section 1501.7(a)). The regulations encourage, but do not require, setting time limits and page limits for the EIS, and holding scoping meetings. (Section 1501.7(b)). Aside from these general outlines, the regulations left the agencies on their own. The Council did not believe, and still does not, that it is necessary or appropriate to dictate the specific manner in which over 100 federal agencies should deal with the public. However, the Council has received several requests for more guidance. In 1980 we decided to investigate the agency and public response to the scoping requirement, to find out what was working and what was not, and to share this with all agencies and the public.

The Council first conducted its own survey, asking federal agencies to report some of their scoping experiences. The Council then contracted with the American Arbitration Association and Clark McGlennon Associates to survey the scoping techniques of major agencies and to study several innovative methods in detail.\*\* Council staff conducted a two-day workshop in Atlanta in June 1980, to discuss with federal agency NEPA staff and several EIS contractors what seems to work best in scoping of different types of proposals, and discussed scoping with federal, state and local officials in meetings in all 10 federal regions.

This document is a distillation of all the work that has been done so far by many people to identify valuable scoping techniques.

\*All citations are to the NEPA regulations, 40 C.F.R. Parts 1500-1508 unless otherwise specified.

\*\*The results of this examination are reported in "Scoping the Content of EISs: An Evaluation of Agencies' Experiences," which is available from the Council or the Resource Planning Analysis Office of the U.S. Geological Survey, 750 National Center, Reston, Va. 22092.

It is offered as a guide to encourage success and to help avoid pitfalls. Since scoping methods are still evolving, the Council welcomes any comments on this guide, and may add to it or revise it in coming years.

### B. What scoping is and what it can do

Scoping is often the first contact between proponents of a proposal and the public. This fact is the source of the power of scoping and of the trepidation that it sometimes evokes. If a scoping meeting is held, people on both sides of an issue will be in the same room and, if all goes well, will speak to each other. The possibilities that flow from this situation are vast. Therefore, a large portion of this document is devoted to the productive management of meetings and the de-fusing of possible heated disagreements.

Even if a meeting is not held, the scoping process leads EIS preparers to think about the proposal early on, in order to explain it to the public and affected agencies. The participants respond with their own concerns about significant issues and suggestions of alternatives. Thus as the draft EIS is prepared, it will include, from the beginning, a reflection or at least an acknowledgement of the cooperating agencies' and the public's concerns. This reduces the need for changes after the draft is finished, because it reduces the chances of overlooking a significant issue or reasonable alternative. It also in many cases increases public confidence in NEPA and the decisionmaking process, thereby reducing delays, such as from litigation, later on when implementing the decisions. As we will discuss further in this document, the public generally responds positively when its views are taken seriously, even if they cannot be wholly accommodated.

But scoping is not simply another "public relations" meeting requirement. It has specific and fairly limited objectives: (a) to identify the affected public and agency concerns; (b) to facilitate an efficient EIS preparation process, through assembling the cooperating agencies, assigning EIS writing tasks, ascertaining all the related permits and reviews that must be scheduled concurrently, and setting time or page limits; (c) to define the issues and alternatives that will be examined in detail in the EIS while simultaneously devoting less attention and time to issues which cause no concern; and (d) to save time in the overall process by helping to ensure that draft statements adequately address relevant issues, reducing the possibility that new comments will cause a statement to be rewritten or supplemented.

Sometimes the scoping process enables early identification of a few serious problems with a proposal, which can be changed or solved because the proposal is still being developed. In these cases, scoping the EIS can actually lead to the solution of a conflict over the proposed action itself. We have found that this extra benefit of scoping occurs fairly frequently. But it cannot be expected in most cases, and scoping can still be considered successful when conflicts are clarified but not solved. This guide does not presume that resolution of conflicts over proposals is a principal goal of scoping, because it is only possible in limited circumstances. Instead, the Council views the principal goal of scoping to be an adequate and efficiently prepared EIS. Our suggestions and recommendations are aimed at reducing the conflicts among affected interests that impede this limited objective. But we are aware of the possibilities of more general conflict resolution that are inherent in any productive discussions among interested parties. We urge all participants in scoping processes to be alert to this larger context, in which scoping could prove to be the first step in environmental problem-solving.

Scoping can lay a firm foundation for the rest of the decision-making process. If the EIS can be relied upon to include all the necessary information for formulating policies and making rational choices, the agency will be better able to make a sound and prompt decision. In addition, if it is clear that all reasonable alternatives are being seriously considered, the public will usually be more satisfied with the choice among them.

## II. Advice for Government Agencies Conducting Scoping

### A. General context

Scoping is a process, not an event or a meeting. It continues throughout the planning for an EIS, and may involve a series of meetings, telephone conversations, or written comments from different interested groups. Because it is a process, participants must

if there are opposing groups of citizens who feel strongly on both sides of an issue, the setting of the large meeting may needlessly create tension and an emotional confrontation between the groups. Moreover, some people may feel intimidated in such a setting, and won't express themselves at all.

The principal drawback of the large meeting, however, is that it is generally unwieldy. To keep order, discussion is limited, dialogue is difficult, and often all participants are frustrated, agency and public alike. Large meetings can serve to identify the interest groups for future discussion, but often little else is accomplished. Large meetings often become "events" where grandstanding substitutes for substantive comments. Many agencies resort to a formal hearing-type format to maintain control, and this can cause resentments among participants who come to the meeting expecting a responsive discussion.

For these reasons, we recommend that meetings be kept small and informal, and that you hold several, if necessary, to accommodate the different interest groups. The other solution is to break a large gathering into small discussion groups, which is discussed below. Using either method increases the likelihood that participants will level with you and communicate their underlying concerns rather than make an emotional statement just for effect.

Moreover, in our experience, a separate meeting for cooperating agencies is quite productive. Working relationships can be forged for the effective participation of all involved in the preparation of the EIS. Work assignments are made by the lead agency, a schedule may be set for production of parts of the draft EIS, and information gaps can be identified early. But a productive meeting such as this is not possible at the very beginning of the process. It can only result from the same sort of planning and preparation that goes into the public meetings. We discuss below the special problems of cooperating agencies, and their information needs for effective participation in scoping.

#### 4. Issuing the public notice

The preliminary look at the proposal, in which you develop the information packet discussed above, will enable you to tell what kind of public notice will be most appropriate and effective.

Section 1501.7 of the NEPA regulations requires that a notice of intent to prepare an EIS must be published in the Federal Register prior to initiating scoping.\* This means that one of the appropriate means of giving public notice of the upcoming scoping process could be the same Federal Register notice. And because the notice of intent must be published anyway, the scoping notice would be essentially free. But use of the Federal Register is not an absolute requirement, and other means of public notice often are more effective, including local newspapers, radio and TV, posting notice in public places, etc. (See Section 1506.6 of the regulations.)

What is important is that the notice actually reach the affected public. If the proposal is an important new national policy in which national environmental groups can be expected to be interested, these groups can be contacted by form letter with ease. (See the *Conservation Directory* for a list of national groups.\*\*) Similarly, for proposals that may have major implications for the business community, trade associations can be helpful means of alerting affected groups. The Federal Register notice can be relied upon to notify others that you did not know about. But the Federal Register is of little use for reaching individuals or local groups interested in a site specific proposal. Therefore notices in local papers, letters to local government officials and personal contact with a few known interested individuals would be more appropriate. Land owners abutting any proposed project site should be notified individually.

Remember that issuing press releases to newspapers, and radio and TV stations is not enough, because they may not be used by

the media unless the proposal is considered "newsworthy." If the proposal is controversial, you can try alerting reporters or editors to an upcoming scoping meeting for coverage in special weekend sections used by many papers. But placing a notice in the legal notices section of the paper is the only guarantee that it will be published.

#### 5. Conducting a public meeting

In our study of agency practice in conducting scoping, the most interesting information on what works and doesn't work involves the conduct of meetings. Innovative techniques have been developed, and experience shows that these can be successful.

One of the most important factors turns out to be the training and experience of the moderator. The U.S. Office of Personnel Management and others give training courses on how to run a meeting effectively. Specific techniques are taught to keep the meeting on course and to deal with confrontations. These techniques are sometimes called "meeting facilitation skills."

When holding a meeting, the principle thing to remember about scoping is that it is a process to initiate preparation of an EIS. It is not concerned with the ultimate decision on the proposal. A fruitful scoping process leads to an adequate environmental analysis, including all reasonable alternatives and mitigation measures. This limited goal is in the interest of all the participants, and thus offers the possibility of agreement by the parties on this much at least. To run a successful meeting you must keep the focus on this *positive* purpose.

At the point of scoping therefore, in one sense all the parties involved have a common goal, which is a thorough environmental review. If you emphasize this in the meeting you can stop any grandstanding speeches without a heavy hand, by simply asking the speaker if he or she has any concrete suggestions for the group on issues to be covered in the EIS. By frequently drawing the meeting back to this central purpose of scoping, the opponents of a proposal will see that you have not already made a decision, and they will be forced to deal with the real issues. In addition, when people see that you are genuinely seeking their opinion, some will volunteer useful information about a particular subject or site that they may know better than anyone on your staff.

As we stated above, we found that informal meetings in small groups are the most satisfactory for eliciting useful issues and information. Small groups can be formed in two ways: you can invite different interest groups to different meetings, or you can break a large number into small groups for discussion.

One successful model is used by the Army Corps of Engineers, among others. In cases where a public meeting is desired, it is publicized and scheduled for a location that will be convenient for as many potential participants as possible. The information packet is made available in several ways, by sending it to those known to be interested, giving a telephone number in the public notices for use in requesting one, and providing more at the door of the meeting place as well. As participants enter the door, each is given a number. Participants are asked to register their name, address and/or telephone number for use in future contact during scoping and the rest of the NEPA process.

The first part of the meeting is devoted to a discussion of the proposal in general, covering its purpose, proposed location, design, and any other aspects that can be presented in a lecture format. A question and answer period concerning this information is often held at this time. Then if there are more than 15 or 20 attendees at the meeting, the next step is to break it into small groups for more intensive discussion. At this point, the numbers held by the participants are used to assign them to small groups by sequence, random drawing, or any other method. Each group should be no larger than 12, and 8-10 is better. The groups are informed that their task is to prepare a list of significant environmental issues and

reasonable alternatives for analysis in the EIS. These lists will be presented to the main group and combined into a master list, after the discussion groups are finished. The rules for how priorities are to be assigned to the issues identified by each group should be made clear before the large group breaks up.

Some agencies ask each group member to vote for the 5 or 10 most important issues. After tallying the votes of individual members, each group would only report out those issues that received a certain number of votes. In this way only those items of most concern to the members would even make the list compiled by each group. Some agencies go further, and only let each group report out the top few issues identified. But you must be careful not to

\*Several agencies have found it useful to conduct scoping for environmental assessments. EAs are prepared where answering the question of whether an EIS is necessary requires identification of significant environmental issues; and consideration of alternatives in an EA can often be useful even where an EIS is not necessary. In both situations scoping can be valuable. Thus the Council has stated that scoping may be used in connection with preparation of an EA, that is, before public notice is required, as well as adequate information on the proposal to make scoping worthwhile. But scoping at this early stage cannot substitute for the normal scoping process unless the earlier public notice stated clearly that this would be the case, and the notice of intent expressly provides that written comments suggesting impacts and alternatives for study will still be considered.

\*\*The Conservation Directory is a publication of the National Wildlife Federation, 1421 16th St., N.W., Washington, D.C. 20036, \$4.00.

ing site differences and limitations during the lecture-format part of a scoping meeting.

d. Videotape meetings

One agency has videotaped whole scoping meetings. Staff found that the participants took their roles more seriously and the taping appeared not to precipitate grandstanding tactics.

e. Review committee

Success has been reported from one agency which sets up review committees, representing all interested groups, to oversee the scoping process. The committees help to design the scoping process. In cooperation with the lead agency, the committee reviews the materials generated by the scoping meeting. Again, however, the final decision on EIS content is the responsibility of the lead agency.

f. Consultant as meeting moderator

In some hotly contested cases, several agencies have used the EIS consultant to actually run the scoping meeting. This is permitted under the NEPA regulations and can be useful to de-fuse a tense atmosphere if the consultant is perceived as a neutral third party. But the responsible agency officials must attend the meetings. There is no substitute for developing a relationship between the agency officials and the affected parties. Moreover, if the responsible officials are not prominently present, the public may interpret that to mean that the consultant is actually making the decisions about the EIS, and not the lead agency.

g. Money saving tips

Remember that money can be saved by using conference calls instead of meetings, tape-recording the meetings instead of hiring a stenographer, and finding out whether people want a meeting before announcing it.

C. Pitfalls

We list here some of the problems that have been experienced in certain scoping cases, in order to enable others to avoid the same difficulties.

1. Closed meetings

In response to informal advice from CEQ that holding separate meetings for agencies and the public would be permitted under the regulations and could be more productive, one agency scheduled a scoping meeting for the cooperating agencies some weeks in advance of the public meeting. Apparently, the lead agency felt that the views of the cooperating agencies would be more candidly expressed if the meeting were closed. In any event, several members of the public learned of the meeting and asked to be present. The lead agency acquiesced only after newspaper reporters were able to make a story out of the closed session. At the meeting, the members of the public were informed that they would not be allowed to speak, nor to record the proceedings. The ill feeling aroused by this chain of events may not be repaired for a long time. Instead, we would suggest the following possibilities:

a. Although separate meetings for agencies and public groups may be more efficient, there is no magic to them. By all means, if someone insists on attending the agency meeting, let him. There is nothing as secret going on there as he may think there is if you refuse him admittance. Better yet, have your meeting of cooperating agencies *after* the public meeting. That may be the most logical time anyway, since only then can the scope of the EIS be decided upon and assignments made among the agencies. If it is well done, the public meeting will satisfy most people and show them that you are listening to them.

b. Always permit recording. In fact, you should suggest it for public meetings. All parties will feel better if there is a record of the proceeding. There is no need for a stenographer, and tape is inexpensive. It may even be better than a typed transcript, because staff and decisionmakers who did not attend the meeting can listen to the exchange and may learn a lot about public perceptions of the proposal.

c. When people are admitted to a meeting, it makes no sense to refuse their requests to speak. However, you can legitimately limit their statements to the subject at hand—scoping. You do not have to permit some participants to waste the others' time if they refuse to focus on the impacts and alternatives for inclusion in the EIS. Having a tape of the proceedings could be useful after the meeting if there is some question that speakers were improperly silenced. But it takes an experienced moderator to handle a situation like this.

d. The scoping stage is the time for building confidence and trust on all sides of a proposal, because this is the only time when there is a common enterprise. The attitudes formed at this stage can carry through the project review process. Certainly it is difficult for things to get better. So foster the good will as long as you can by listening to what is being said during scoping. It is possible that out of that dialogue may appear recommendations for changes and mitigation measures that can turn a controversial fight into an acceptable proposal.

2. Contacting interested groups

Some problems have arisen in scoping where agencies failed to contact all the affected parties, such as industries or state and local governments. In one case, a panel was assembled to represent various interests in scoping an EIS on a wildlife-related program. The agency had an excellent format for the meeting, but the panel did not represent industries that would be affected by the program or interested state and local governments. As a result, the EIS may fail to reflect the issues of concern to these parties.

Another agency reported to us that it failed to contact parties directly because staff feared that if they missed someone they would be accused of favoritism. Thus they relied on the issuance of press releases which were not effective. Many people who did not learn about the meetings in time sought additional meeting opportunities, which cost extra money and delayed the process.

In our experience, the attempt to reach people is worth the effort. Even if you miss someone, it will be clear that you tried. You can enlist a few representatives of an interest group to help you identify and contact others. Trade associations, chambers of commerce, local civic groups, and local and national conservation groups can spread the word to members.

3. Tiering

Many people are not familiar with the way environmental impact statements can be "tiered" under the NEPA regulations, so that issues are examined in detail at the stage that decisions on them are being made. See Section 1508.28 of the regulations. For example, if a proposed program is under review, it is possible that site specific actions are not yet proposed. In such a case, these actions are not addressed in the EIS on the program, but are reserved for a later tier of analysis. If tiering is being used, this concept must be made clear at the outset of any scoping meeting, so that participants do not concentrate on issues that are not going to be addressed at this time. If you can specify when these other issues will be addressed it will be easier to convince people to focus on the matters at hand.

4. Scoping for unusual programs

One interesting scoping case involved proposed changes in the Endangered Species Program. Among the impacts to be examined were the effects of this conservation program on *user activities* such as mining, hunting, and timber harvest, instead of the other way around. Because of this reverse twist in the impacts to be analyzed, some participants had difficulty focusing on useful issues. Apparently, if the subject of the EIS is unusual, it will be even harder than normal for scoping participants to grasp what is expected of them.

In the case of the Endangered Species Program EIS, the agency planned an intensive 3 day scoping session, successfully involved the participants, and reached accord on several issues that would be important for the future implementation of the program. But the participants were unable to focus on impacts and program alternatives for the EIS. We suggest that if the intensive session had been broken up into 2 or 3 meetings separated by days or weeks, the participants might have been able to get used to the new way of thinking required, and thereby to participate more productively. Programmatic proposals are often harder to deal with in a scoping context than site specific projects. Thus extra care should be taken in explaining the goals of the proposal and in making the information available well in advance of any meetings.

D. Lead and Cooperating Agencies

Some problems with scoping revolve around the relationship between lead and cooperating agencies. Some agencies are still uncomfortable with these roles. The NEPA regulations, and the *40 Questions and Answers about the NEPA Regulations*, 46 Fed. Reg. 18026, (March 23, 1981) describe in detail the way agencies are now asked to cooperate on environmental analyses. (See Questions 9,

plicants" so that designated staff are available to consult with the applicants, to advise applicants of information that will be required during review, and to insure that the NEPA process commences at the earliest possible time. (Section 1501.2(d)). This section of the regulations is intended to ensure that environmental factors are considered at an early stage in the applicant's planning process. (See *40 Questions and Answers about the NEPA Regulations*, 46 Fed. Reg. 18028, Questions 8 and 9.)

Applicants should take advantage of this requirement in the regulations by approaching the agencies early to consult on alternatives, mitigation requirements, and the agency's information needs. This early contact with the agency can facilitate a prompt

initiation of the scoping process in cases where an EIS will be prepared. You will need to furnish sufficient information about your proposal to enable the lead agency to formulate a coherent presentation for cooperating agencies and the public. But don't wait until your choices are all made and the alternatives have been eliminated (Section 1506.1).

During scoping, be sure to attend any of the public meetings unless the agency is dividing groups by interest affiliation. You will be able to answer any questions about the proposal, and even more important, you will be able to hear the objections raised, and find out what the real concerns of the public are. This is, of course, vital information for future negotiations with the affected parties.

## THE ENVIRONMENTAL LAW INSTITUTE

For a quarter century, the Environmental Law Institute has played a pivotal role in shaping the fields of environmental law, management, and policy domestically and abroad. Today, ELI is an internationally recognized, independent research and education center.

Through its information services, training courses and seminars, research programs, and policy recommendations, the Institute activates a broad constituency of environmental professionals in government, industry, the private bar, public interest groups, and academia. Central to ELI's mission is convening this diverse constituency to work cooperatively in developing effective solutions to pressing environmental problems.

The Institute is governed by a board of directors who represent a balanced mix of leaders within the environmental profession. Support for the Institute comes from individuals, foundations, government, corporations, law firms, and other sources.



**1616 P Street, N.W., Suite 200**  
**Washington, D.C. 20036**  
**Telephone: (202) 939-3800**  
**Fax: (202) 939-3868**

**E-mail: [law@eli.org](mailto:law@eli.org) • Web site: [www.eli.org](http://www.eli.org)**