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Action Forcing Under NEPA: Beyond the Environmental Impact Statement

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ACTION-FORCING UNDER NEPA: BEYOND THE ENVIRONMENTAL IMPACT STATEMENT

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The National Environmental Policy Act of 19691 (NEPA) was enacted in response to the growing awareness that man cannot continue to exploit the earth's physical resources in ignorance of "the profound impact of [his] activity on . . . the natural environment."2 Realizing that most individuals work toward their own social or economic ends unmindful of the cumulative impact of their actions,3 Congress passed a full disclosure law designed to apprise the public of the seriousness of the problem and introduce environmental information into federal decision-making.4 To effectuate these goals and minimize conflicting.

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2. NEPA § 101(a), 42 U.S.C. § 4332(a) (1970) begins:
The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man. . . .
The Senate Committee also stated that Congress was concerned because "the evidence of environmental mismanagement is accumulating at an ever-increasing rate as a result of population growth, increased pressures on a finite resource base, and advancing technological developments which have enlarged man's capacity to effectuate environmental change." S. REP. No. 91-296, 91st Cong., 1st Sess. 8 (1969) (hereinafter cited as Senate Report).
3. Senate Report, supra note 2, at 9. The committee believed that the principal cause of the threat to our environment was the unintentional and unanticipated consequences of the single-minded pursuit of "more immediate goals" and inadequate consideration of those consequences of which the actor is aware. Id.
4. H.R. REP. No. 91-378, 91st Cong., 1st Sess. 3-8 (1969) (hereinafter cited as House Report); Senate Report, supra note 2, at 4-6, 14. Both the Senate and the House felt there was a need for "public enlightenment" as to environmental issues. Two positive
federal activities, Congress added a series of action-forcing provisions, contained in section 102(2) of NEPA, which require the federal government and its agencies to carefully evaluate the environmental consequences of all proposed federal actions.

Because the courts and the Council on Environmental Quality (CEQ) generally defer to agency expertise on substantive decisions it is through private challenges to an agency’s compliance with the procedural requirements of section 102(2) that implementation of the Act’s policies may be ensured. Procedural challenges have primarily focused on the absence or inadequacy of the environmental impact statement (EIS) required by subparagraph 102(2)(C). Review under

5. House Report, supra note 4, at 3-4; Senate Report, supra note 2, at 8. Surprisingly, one expected result was to increase public confidence in agencies. Id.


9. Once an agency has complied with NEPA’s procedural directives, courts may only review whether the agency has taken a “hard look” at environmental consequences—whether the specific choice of action is wise or appropriate. Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976).

The CEQ will not review agency decisions. Instead the CEQ limits its duties to disseminating environmental information to the public, and state and local governments, promulgating guidelines for agency regulations, and providing Congress and the President with an environmental progress report on agency implementation of NEPA. See NEPA § 202, 42 U.S.C. § 4342 (1970); House Report, supra note 4, at 2760-61; notes 70-76 and accompanying text infra.

10. Of the approximately 700 reported decisions, only a very small percentage mention any action-forcing provision other than subparagraph 102(2)(C)’s impact statement requirement. Those cases which do refer to other subparagraphs of section 102(2), usually do so in conjunction with subparagraph 102(2)(C). For example, in Save Our Invaluable Land v. Needham, 10 E.R.C. 1610 (10th Cir. [no date given]), the Tenth Circuit stated:

Sections (A) and (B) are, in a sense, declarations of policy, and to effectuate such policies, Section (C) requires that an environmental impact statement be filed on all major federal actions, and lists five specific matters to be covered in such statement. Section (C) is apparently designed to make certain that there be compliance with the statement of policy announced in Sections (A) and (B). Id. at 1613. Less than 10 cases are based upon a subparagraph of section 102(2) independent of subparagraph 102(2)(C) entirely.

As noted by the Supreme Court in a footnote to Kleppe v. Sierra Club, 427 U.S. 390 (1976), a court may enter the agency review process under subparagraph 102(2)(C) when "someone protests either the absence or the adequacy of the final impact statement." Id. at 406 n.15.
that section, however, has become more difficult due to judicial interpretations limiting the effectiveness and applicability of subparagraph 102(2)(C). 11

Whenever agencies are excused from preparation of a complete EIS, it is likely that many of the policies established by NEPA will not be fully implemented. 12 Additional duties are imposed on agencies under the remaining subparagraphs of section 102(2). Regardless of any limitations on review the courts read into subparagraph 102(2)(C), agency compliance may still be effectively challenged under subparagraphs 102(2)(A), (B), (D) and (G), independent of subparagraph 102(2)(C), 13 thereby safeguarding the essential policies of the Act.

This Note will review the limitations under subparagraph 102(2)(C) that courts have imposed and will conduct a section-by-section analysis of the remaining action-forcing provisions of section 102(2). These provisions should allow development of alternative litigation strategies that may be used to promote full consideration and implementation of NEPA's policies in federal decision-making.

I. LIMITATIONS ON SUBPARAGRAPH 102(2)(C) REQUIREMENTS

Subparagraph 102(2)(C) provides in pertinent part:

(2) all agencies of the Federal Government shall—

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—
(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,

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. . . . 14

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11. See notes 15-42 and accompanying text infra.
12. See notes 165-68 and accompanying text infra.
13. For a discussion of the duties imposed by section 102(2) of NEPA, see notes 43-164 and accompanying text infra. For authority on the independence of various subparagraphs of section 102(2), see note 45 and accompanying text infra.
A number of threshold decisions required by the subparagraph limit the application of the EIS requirement. No impact statement is required unless the proposed action is major and federal and "significantly affects the quality of the human environment."15 Although agencies are required to prepare a "negative declaration"16 detailing the reasons for a threshold decision that an EIS is not required,17 significant environmental impacts may still be overlooked. If the agency determines a proposal is neither major nor federal, impacts may never be discovered and properly evaluated. If the agency has determined that the environmental impact is not significant, new environmental impacts may escape detection and new environmental research which could be used by the public or other governmental agencies is left undone. Furthermore, subparagraph 102(2)(C) does not require a continuing reevaluation of the agency's threshold determination. Thus if changes occur in the program, there is no assurance that the agency will apprehend any increased or newly created impacts.

Although not directly limiting the application of subparagraph 102(2)(C), the Supreme Court recently construed the timing of the EIS requirement and limited the extent to which environmental factors are considered in the early stages of the decision-making process. Under the Court's holding in Kleppe v. Sierra Club,18 compliance with subparagraph 102(2)(C) cannot be challenged until the time when the Act requires an EIS be filed, that being when the agency makes its "recommendation or report."19 As a result, an action based on 102(2)(C) can no longer be used to ensure that agencies are considering environmental impacts prior to decision-making rather than preparing an EIS as a post hoc justification for their substantive decision. An agency may thus commit significant resources, time and manpower to a project before it undertakes preparation of an EIS. The magnitude of the investment undermines any benefit the agency's eventual balancing of interests would have achieved.

19. Id. at 405-06.
Courts have also created some exceptions to the 102(2)(C) EIS requirement. Justification for the judicially imposed limitations arise out of considerations of convenience,\(^{20}\) practicality\(^{21}\) and even notions of "national security."\(^{22}\) As long as these exceptions are read and applied narrowly, perhaps the vitality of 102(2)(C) will be unimpaired. It is the danger of their broader applications, however, which increases the significance of the exceptions. The first exemption from NEPA's EIS requirement appeared in *Portland Cement Association v. Ruckelshaus*.\(^{23}\) In that case the District of Columbia Circuit held that EPA was exempt from preparing an EIS when promulgating new source performance standards under section 111 of the Clean Air Act.\(^{24}\) The court reasoned that the rule-making procedures followed by EPA in setting the standards were the *functional equivalent* of an EIS.\(^{25}\) The court believed that because EPA's sole function is to protect environmental values,\(^{26}\) the duties imposed under the Clean Air Act struck "a workable balance between some of the advantages and some of the disadvantages of full application of NEPA."\(^{27}\) The "disadvantages of full application" of the EIS requirement apparently include the costs and delays arising from litigation and duplication of efforts. Any extension of this doctrine beyond the narrow limits set in this case would be an unwarranted exception to NEPA.\(^{28}\)

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21. See Flint Ridge Dev. Co. v. Scenic Rivers Ass'n, 426 U.S. 776 (1976) (impractical to prepare an EIS within 30 days); Redding v. Morton, 6 E.R.C. 1887 (D.C. Mont. 1974) (requiring EIS on mineral leases at time prospecting permits issued not justified because the expense would prevent any decision, not insure a better informed one).


23. 486 F.2d 375 (D.C. Cir. 1973), cert. denied, 417 U.S. 921 (1974). See also Indiana & Michigan Electric Co. v. EPA, 509 F.2d 839 (7th Cir. 1975); Amoco Oil Co. v. EPA, 501 F.2d 722 (D.C. Cir. 1974); Environmental Defense Fund, Inc. v. EPA, 489 F.2d 1247 (D.C. Cir. 1973); Essex Chemical Corp. v. Ruckelshaus, 486 F.2d 427 (D.C. Cir. 1973); Anaconda Co. v. Ruckelshaus, 482 F.2d 1301 (10th Cir. 1973); Buckeye Power, Inc. v. EPA, 481 F.2d 162 (6th Cir. 1973); Duquesne Light Co. v. EPA, 481 F.2d 1 (3d Cir. 1973); International Harvester Co. v. Ruckelshaus, 478 F.2d (D.C. Cir. 1973); Appalachian Power Co. v. EPA, 477 F.2d 495 (4th Cir. 1973).

24. 486 F.2d at 383-87.

25. Id. at 386.

26. Id. at 386 n.42.

27. Id. at 386.

28. The D.C. Circuit in *Portland Cement* emphasized that functional equivalence was a very narrow exception and that "NEPA must be accorded full vitality as to non-environmental agencies." Id. at 387. Claims by agencies other than EPA have been
Another example of judicial concern with delays caused by 102(2)(C) compliance occurs in *Flint Ridge Development Co. v. Scenic Rivers Association.* 29 The Supreme Court found a conflict between a statutory deadline on agency action and the inherent delay caused by preparation of an impact statement. 30 Under the Interstate Land Sales Full Disclosure Act, 31 HUD is required to review registration of land to be sold in interstate commerce. Registration is automatically effective after thirty days unless HUD finds the registration is false and misleading on its face. 32 Since it is impractical for an agency to prepare a complete impact statement within thirty days, the Court held that HUD was not required to file an EIS. 33 Thus whenever a statutory deadline expediting agency action is set, 34 subparagraph 102(2)(C) cannot be used to ensure that an agency has taken all environmental factors into account. In addition, no environmental information concerning land development is disseminated to interested federal and state agencies and members of the public.

NEPA's action-forcing provisions require agencies to comply "to the fullest extent possible." 35 An agency working under a statutory deadline presumably could be required to prepare as complete an impact statement as possible within the time allowed. 36 In *Scenic* made and rejected. For example, in Natural Resources Defense Council v. Morton, 388 F. Supp. 829 (D.D.C. 1974), *cert. denied,* 427 U.S. 913 (1976), the court held that the Bureau of Land Management was not excused from the impact statement requirement when granting grazing leases under the Taylor Grazing Act because that Act was not purely environmental. The Bureau was also required to promote stabilization of the livestock industry. *Id.* at 833. However, this case indicates that any agency with direct environmental duties may argue that the doctrine should apply.

30. 426 U.S. at 791.
32. *Id.* at § 1706.
34. 426 U.S. at 791.
36. A similar situation occurred in Environmental Defense Fund v. Adams, 10 E.R.C. 1317 (D.D.C. 1977), where the agency had only six months in which to prepare the impact statement. The district court acknowledged that "[e]nvironmental impact statements often take a good deal longer than this to prepare fully. . . . Therefore the Secretary may [very] well have to compromise somewhat on the completeness of the impact statement in order to have the revision published by January of next year." *Id.* at 1320. *See also* Louisiana v. FPC, 503 F.2d 844 (5th Cir. 1974) (agency only required to prepare the best EIS possible under the circumstances).
Rivers, however, instead of reducing the thoroughness of the EIS, the Court eliminated the need for an EIS altogether. This new standard of impracticality may be applied to many situations other than time deadlines.

A significant 102(2)(C) exception has been created to cover emergency or temporary agency actions and their attendant time constraints. In most emergency situations, the agency must act quickly if it acts at all. This duty to act conflicts with the time delay caused when compliance with NEPA is required. Under these circumstances, courts have held that Congress did not intend NEPA to apply. Although this may accord with both the statute and its legislative history, it is justified only to the extent that the emergency situation postpones preparation of an impact statement. Even so consideration of environmental impacts should be undertaken at the earliest opportunity because excusing even a temporary action from NEPA's requirements results in some quantum of environmental protection being irretrievably lost.

This exception is more significant because it applies to any agency regardless of whether it is already required to consider environmental factors. Thus, if this exception is applied, there is no guarantee that any environmental impacts will be evaluated by the agency.

See Milo Community Hosp. v. Weinberger, 525 F.2d 144 (1st Cir. 1975) (termination of status as provider of services under Social Security Act for non-compliance with federal fire safety rules); Louisiana v. FPC, 503 F.2d 844 (5th Cir. 1974) (EIS must be filed by FPC when it promulgates a final gas curtailment plan pursuant to the Natural Gas Act although no EIS would be necessary if it were only the interim order); Gulf Oil v. Simon, 502 F.2d 1154 (Temp. Emer. Ct. App. 1974) (temporary allocations of crude oil and petroleum products under the Emergency Petroleum Allocation Act); Dry Color Manufacturers' Ass'n v. Dep't of Labor, 486 F.2d 98 (3d Cir. 1973) (no EIS required for promulgation of emergency temporary standards under the Occupational Safety and Health Act); Atlanta Gas & Light v. FPC, 476 F.2d 142 (5th Cir. 1973) (no EIS is necessary for interim suspension orders under the Natural Gas Act).

NEPA § 105, 42 U.S.C. § 4335 (1970), states that "[t]he policies and goals set forth in this chapter are supplementary to those set forth in existing authorizations of Federal agencies." The Conference Committee Report stated that this section meant that federal agencies must comply with NEPA "unless to do so would clearly violate their existing statutory authorizations." CONF. REP. ON S. 1075, H.R. REP. No. 91-765, 91st Cong., 1st Sess. 5 (1969). If a statute is interpreted to impose an absolute duty to act within a set time and the purpose behind the agency's primary obligation would be disrupted by undue delay, then the statutory conflict would be clear. In emergency situations, speedy action is a necessity and a statutory conflict is fairly clear, although based upon practical considerations. However, in these instances the Congress balanced the policies behind both laws and decided immediate safety was most important, especially since NEPA would be complied with eventually.

For example, an agency might be able to mitigate or avoid adverse environmental consequences of the temporary action. In addition, if the agency begins collecting and assessing environmental data at an early point in the decision-making process, it will
Courts have held that an EIS is not required in other situations. Preparation of an impact statement prior to approval of prospecting permits was excused where it would allegedly entail such a massive effort that it would prevent any decision rather than assure a better-informed decision. Similarly, despite serious doubts as to the adequacy of an impact statement, an underground nuclear explosion was allowed, based on considerations of national security.

Although the 102(2)(C) exceptions show no signs of entirely eliminating the EIS requirement, an opportunity to advance at least some goals of the Act is lost whenever action is taken free from the subparagraph's requirements. It is therefore important to develop other strategies to challenge agency procedure under section 102(2).

II. INDEPENDENT USE OF ACTION-FORCING PROVISIONS

The action-forcing provisions of section 102(2) have often been read as a unit. Under this view, 102(2)(C) is seen as providing a written record that the methodologies established in the other subparagraphs have been complied with. Such a constricted reading of the statute is not warranted. The EIS is not the only means of checking agency compliance with NEPA's procedural mandates. Implicit in many court opinions is the assumption that an independent cause of action can be based upon any of the subparagraphs of section 102(2).

42. Committee for Nuclear Responsibility, Inc. v. Seaborg, 463 F.2d 796 (D.C. Cir. 1971). The court felt that the potential harm to normal security and foreign policy resulting from any delay outweighed the policies established by NEPA. Id. at 798.
43. See, e.g., Save Our Invaluable Land v. Needham, 10 E.R.C. 1610, 1613 (10th Cir. [no date given]); Environmental Defense Fund, Inc. v. Corps of Eng'rs, 492 F.2d 1123, 1131-32 (5th Cir. 1974).
44. See, e.g., Environmental Defense Fund, Inc. v. Corps of Eng'rs, 492 F.2d 1123, 1131-32 (5th Cir. 1974).
45. See, e.g., Natural Resources Defense Council v. NRC, 539 F.2d 824, 842 (2d Cir. 1976) (stating that subparagraph 102(2)(D) must be complied with "even if no formal impact statement is filed"); Milo Community Hosp. v. Weinberger, 525 F.2d 144 (1st Cir. 1975) (court rejected claim based on subparagraphs 102(2)(A), (B) & (D) because not supported by either the complaint or the evidence); Natural Resources Defense Council v. Callaway, 524 F.2d 79, 93 (2d Cir. 1975) (stating that subparagraph 102(2)(D) is "independent of and of wider scope than the [EIS requirement]"); Trinity Episcopal School Corp. v. Romney, 523 F.2d 88, 93 (2d Cir. 1975) (stating that subparagraph 102(2)(D) is independent of the EIS requirement); Sierra Club v. Morton, 514 F.2d 856 (D.C. Cir. 1975), rev'd on other grounds, Kleppe v. Sierra Club, 427 U.S. 390 (1976) (stating that subparagraphs 102(2)(A) & (D) must be complied with prior to the impact statement
number of cases have analyzed the functions of the subparagraphs of section 102(2) other than subparagraph 102(2)(C). Although courts attempted to develop them into viable enforcement devices shortly after NEPA was enacted, emphasis quickly shifted to enforcement of the EIS alone. Only recently has a trend toward renewed use of the neglected subparagraphs become discernible.

**A. Subparagraph 102(2)(A)—A Systematic Interdisciplinary Approach**

Subparagraph 102(2)(A) provides:

(2) all agencies of the Federal Government shall—

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social

under subparagraph 102(2)(C); Environmental Defense Fund, Inc. v. Corps of Eng’rs, 492 F.2d 1123, 1135 (5th Cir. 1974) (stating that the requirements of subparagraph 102(2)(D) are more extensive than those contained in subparagraph 102(2)(C)); First National Bank of Chicago v. Richardson, 484 F.2d 1369 (7th Cir. 1973) (court considered challenge under section 102(2) and held that subparagraphs 102(2)(A) & (D) were complied with and subparagraphs 102(2)(B) & (C) were inapplicable); Hanly v. Kleindienst, 471 F.2d 823 (2d Cir. 1973), cert. denied, 412 U.S. 908 (1973) (holding agency’s negative declaration must comply with subparagraphs 102(2)(A), (B) & (D) even though subparagraph 102(2)(C) might not apply); Mid-Shiawassee County Concerned Citizens v. Train, 408 F. Supp. 650 (E.D. Mich. 1976) (holding that negative assessment must reflect a systematic, interdisciplinary approach); McDowell v. Schlesinger, 404 F. Supp. 221, 251-52 (W.D. Mo. 1975) (holding that subparagraph 102(2)(A) was violated and that the subparagraph applies regardless of subparagraph 102(2)(C)’s applicability); Illinois v. Butterfield, 396 F. Supp. 632 (N.D. Ill. 1975) (holding that complaint stated a cause of action when based solely upon subparagraphs 102(2)(A), (B), & (D)); Simmans v. Grant, 370 F. Supp. 5 (S.D. Tex. 1974) (negative statement must be prepared so that courts can review for agency compliance with subparagraphs 102(2)(A), (B) & (D)).

Two methods have been used to review agency procedures without challenging the preparation or adequacy of the EIS. In Simmans v. Grant, 370 F. Supp. 5 (S.D. Tex. 1974), the court held a hearing in order to review agency compliance with subparagraphs 102(2)(A), (B) & (D). Id. at 18. The agency had already determined that subparagraph 102(2)(C) was inapplicable. Thus the basic issue was whether the agency had utilized subparagraph 102(2)(A), (B) & (D) procedures in making that determination. Id. at 17-19. Therefore, a hearing may be used during which the agency must describe the approach and consideration it is giving to a particular problem. The court must then judge whether the approach adopted fulfills the required analysis under NEPA. Second, courts have imposed an affirmative duty on agencies to develop a reviewable record whenever they determine that an EIS is unnecessary, see, e.g., Hanly v. Kleindienst, 471 F.2d 823, 835 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973); Hanly v. Mitchell, 460 F.2d 640, 649 (2d Cir. 1972), so that the court can determine whether the agencies’ determination was arbitrary or unreasonable. A similar record could be required so that a court can determine whether NEPA procedures have been followed. This would save the time required for a hearing and only slightly increase the burden on agencies who generally are required to keep extensive records of their activities. See K. DAVIS, ADMINISTRATIVE LAW § 605 (1972). Where an agency’s own regulations require such record be maintained, then a court can use this record to judge whether the agency has complied with NEPA. See, e.g., Simmans v. Grant, 370 F. Supp. 5, 17-18 (S.D. Tex. 1974).
sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man’s environment.\textsuperscript{46}

To ensure that no environmental impacts of agency action are overlooked,\textsuperscript{47} 102(2)(A) requires a sponsoring agency to use a systematic and interdisciplinary approach in reaching decisions. Although some courts refuse to find a violation because this requirement is "something opaque,"\textsuperscript{48} other courts have interpreted the subparagraph to impose concrete demands on agencies.\textsuperscript{49}

In order to effectuate the general policy that environmental research directly agency planning, not substantiate it, two early district court cases held that "the completion of an adequate research program [is] a prerequisite to agency action."\textsuperscript{50} This burden will be met if the agency undertakes a diligent, good faith effort "which utilizes effective methods and reflects the current state of the art of relevant scientific disciplines."\textsuperscript{51} Although less stringent standards have been applied,\textsuperscript{52} it is clear that a mere "bald conclusion reached after perfunctory and superficial analysis of clearly inadequate data" is inadequate.\textsuperscript{53} Data

\textsuperscript{47} Inman Park Restoration v. Urban Mass Transp. Admin., 414 F. Supp. 99, 120 (N.D. Ga. 1976) ("to the extent that the project will have adverse impact, it will not have been inadvertently authorized, but knowingly authorized"); Mid-Shiawassee County Concerned Citizens v. Train, 408 F. Supp. 650, 656 (E.D. Mich. 1976) (a systematic, interdisciplinary approach insures that, "in deciding not to require an impact statement, no significant environmental factor is overlooked."); Sierra Club v. Froehlke, 359 F. Supp. 1289, 1347 (S.D. Tex. 1973) ("the reason underlying this approach is to ensure that some significant impact does not go undiscovered until too late, merely because the sponsoring agency was unaware of potential problems which the reviewing agency might suspect.").


\textsuperscript{49} See notes 50-67 infra and cases cited therein.


\textsuperscript{52} If agency studies show a project was not "inadvertently authorized, but knowingly authorized," Inman Park Restoration v. Urban Mass Transp. Admin., 414 F. Supp. 99, 120 (N.D. Ga. 1976), or, even further, that "each alternative was explored from environmental, social or aesthetic perspectives," Mid-Shiawassee County Concerned Citizens v. Train, 408 F. Supp. 650, 659 (E.D. Mich. 1976), then subparagraph 102(2)(A) has been held satisfied.

\textsuperscript{53} McDowell v. Schlesinger, 404 F. Supp. 221, 251 (W.D. Mo. 1975). In Hanly v. Kleindienst, 471 F.2d 823 (2d Cir. 1972), the Second Circuit held that the Government
available to the agency is adequate if it allows the agency to give thoughtful and reasoned consideration to all potential environmental effects. If such data is unavailable, it should be clear that an agency must initiate research and investigation before it may go forward on a project, including outside consultation in areas beyond the agency’s expertise.

Such an approach ensures that no environmental issue or relevant information is overlooked merely because the agency lacks the present expertise to suspect a problem exists. For example, in *McDowell v. Schlesinger* an Army officer specializing in industrial health determined that the relocation of certain Army personnel would have no significant impact. The district court held that an interdisciplinary approach required that experts in other disciplines be consulted.

Services Administration had complied with subparagraph 102(2) (A) while building a Metropolitan Civic Center since they had retained an architect and their negative declaration "scrupulously [took] into account the aesthetic and tangible factors involved in the designing and planning" of the Civic Center. *Id.* at 835. Although this case only stands for the idea that scrupulous consideration of environmental factors is sufficient, not required, it is clear that the court expected a diligent investigation by the agency.

In *Nucleus of Chicago Homeowners Ass’n v. Lynn*, 524 F.2d 225 (7th Cir. 1975), *cert. denied*, 424 U.S. 967 (1976), plaintiffs claimed that HUD violated subparagraph 102(2)(A) because HUD failed to read a study on social problems in public housing which dealt with the area HUD was contemplating as a housing site. *Id.* at 232. The Seventh Circuit held that an agency need not "consider all documents possibly relevant to a given environmental issue" so long as they gave good faith consideration to the impact of the project on the social environment of the neighborhood. *Id.*

In *Sierra Club v. Morton*, 510 F.2d 813 (5th Cir. 1975), plaintiffs had challenged Department of Interior’s action granting offshore oil leases before completing a detailed study on the hazards to geologic conditions of the ocean floor. *Id.* at 827. The Fifth Circuit held that since the leases were short term and gave the agency a continuing ability to control and adjust future actions, it was not unreasonable for the agency to grant the leases without finishing the study. *Id.* at 827-28. A strong inference is that in the absence of such continuing control, the completion of the study would have been mandatory under 102(2)(A). Even stronger, the court’s opinion assumes that the study will be completed subsequent to the EIS in the event it is not completed beforehand.

54. McDowell v. Schlesinger, 404 F. Supp. 221, 251-52 (W.D. Mo. 1975) (Data must be sufficient to give agency the “opportunity to identify all areas of potential environmental impact, or to give these areas the informed ‘hard look’ that is required. . . .” The agency must have given “thoughtful and reasoned consideration to all potential environmental effects of the proposed action.”); Simmans v. Grant, 370 F. Supp. 5, 19 (S.D. Tex. 1974) (Purpose of subparagraph is to “ensure an intelligent assessment of the ‘significance’ of the project’s environmental impacts.”).

55. This is the express requirement of subparagraph 102(2)(G). See notes 156-64 and accompanying text infra.


57. *Id.* at 251-52.

58. *Id.*
Likewise in Simmans v. Grant, the Soil Conservation Service was found to have failed to use an interdisciplinary approach in deciding whether a water conservation project would have a significant impact because it did not consult other agencies having expertise over waterway and stream modification. The court reasoned that such consultation is necessary "to ensure an intelligent assessment" by obtaining all views of interested agencies and to ensure a "closer coordination between engineering, economic and environmental experts."

The broadest interpretation of this subparagraph to date was handed down by the district court in Sierra Club v. Froehlke. The court determined that the purpose of the requirement was "to alert the sponsoring officials as to the studies or inquiries that need to be made" and thus ensure that no impact goes undiscovered "merely because the sponsoring agency was unaware of potential problems." To fully effectuate this purpose, the court held that not only must the sponsoring agency seek out and contact appropriate authorities, but other federal agencies must check the Federal Register regularly to ensure that no activity which falls within their area of competence will be authorized unless they have issued some opinion as to its environmen-
tal consequences. 64 The court also held that the sponsoring agency must defer to the analysis given by the agency "best equipped to render an expert opinion." 65 The sponsoring agency may adopt its own evaluation only if it produces clear and convincing evidence that the reviewing agency was incorrect and gives that agency an opportunity to modify its evaluation. 66 The court had two reasons for establishing this rule. First, it would not make sense to force a sponsoring agency to consult with other agencies and experts and then allow the sponsoring agency to ignore the advice that is given. 67 Second, the rule fits the court's perception of the statutory scheme that "Congress intended to provide a form of environmental 'checks and balances' with which federal agencies might complement one another and thereby keep the ship of state, as unwieldy as it often is, on a more steady course as 'trustee of the environment for succeeding generations.'" 68

In conducting a systematic and interdisciplinary study of potential environmental impacts, perfection in gathering information is not required and hypercritical complaints will not be accepted by a reviewing court. 69 However, if the purpose of the study is to uncover all known and unknown impacts, then characterizing a study as hypercritical or unreasonable assumes that no useful or vital knowledge will be discovered. The threshold decision itself is thus only a bald conclusion. A study should be dismissed only if it is not relevant to the particular project or is cumulative and repetitive.

Ideally, an agency will have examined all possible impacts of their action, if only to determine that a particular impact will not be significant. If no consideration is given to an environmental issue which could conceivably be raised by a project, then an action should lie against the agency unless it undertakes some preliminary investigation to determine whether a measurable impact will occur. If the agency acknowledges the relevance of an environmental issue, then an action may lie if the complaint shows that data is insufficient to adequately evaluate or mitigate adverse environmental effects, or that the information exists but is not being considered by the agency. No statutory language limits the time when such a challenge may be brought. Since

64. Id. at 1346-47.
65. Id. at 1347-49.
66. Id.
67. Id.
68. Id. at 1349.
69. Nucleus of Chicago Homeowners Ass'n v. Lynn, 524 F.2d 225 (7th Cir. 1975).
courts do not like to infringe upon agency decision-making, however, complaints based on omissions in the agency’s systematic, interdisciplinary approach should only be brought after the agency has refused to act on suggestions made by complainants.

Given our incomplete understanding of the total impact of our activities on the environment, any questions of relevance should be resolved in favor of inclusion in a study. Nothing is lost by requiring research the first time an environmental issue is confronted. While the burden on an agency acting in a new and inadequately researched area is great, once information on various impacts is developed, the burden on subsequent agency studies will be minimized. This forced pooling of knowledge and expertise of many agencies accelerates NEPA’s goals and prevents repetitious research.

B. Subparagraph 102(2)(B)—Consideration of Unquantified Environmental Values and Amenities

Subparagraph 102(2)(B) provides:

(2) all agencies of the Federal Government shall—

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality . . . , which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations. 70

1. Deference to CEQ Regulations

CEQ first interpreted this subparagraph together with section 103 71 to place “primary responsibility upon each individual federal agency to prepare its own NEPA procedures,” 72 and published general guidelines for agencies preparing impact statement regulations. 73 Although the

73. In Natural Resources Defense Council v. S.E.C., 10 ERC 1026 (D.D.C. 1977), the district court found that the S.E.C. had violated subparagraph 102(2)(B) for “failure to make a serious effort to develop appropriate guidelines and standards for disclosure of environmental information” in proxy statements and federal securities registration statements. Id. at 1037.
74. See 40 C.F.R. § 1500 (1976).
NEPA guidelines are only advisory, the courts have stated that CEQ interpretations of NEPA are entitled to great weight and deference.\textsuperscript{74} The language, “in conjunction with the [CEQ],” clearly requires more than just preparation of agency \textit{ guidelines} by CEQ.\textsuperscript{75} If an agency fails to \textit{consult} CEQ in preparing its own procedures, it has violated subparagraph 102(2)(B). In addition, the subparagraph can be read to require not only consultation with CEQ but acquiescence to CEQ advice because CEQ was intended to be the best informed agency on environmental matters. This interpretation corresponds to a similar theory used under subparagraph 102(2)(A).\textsuperscript{76}

2. Quantification

In \textit{Calvert Cliffs' Coordinating Committee v. AEC},\textsuperscript{77} the District of Columbia Circuit stated that 102(B) requires a “rather finely tuned and systematic balancing” of costs and benefits to “ensure that . . . the optimally beneficial action is finally taken.”\textsuperscript{78} This includes the possibility of abandoning the project.\textsuperscript{79} Although the court does not state how complete the assessment of environmental costs must be, a “finely tuned” analysis implies more than subjective consideration of environmental impacts.

Precise formulas reducing environmental amenities to mathematical absolutes are not required,\textsuperscript{80} but agencies must “search out, develop

\textsuperscript{74} Greene County Planning Bd. v. FPC, 455 F.2d 412, 421 (2d Cir.), \textit{cert. denied}, 409 U.S. 849 (1972); \textit{see} Warm Springs Dam Task Force v. Gribble, 417 U.S. 1301, 1310 (1974); Environmental Defense Fund, Inc. v. TVA, 468 F.2d 1164, 1178 (6th Cir. 1972).


\textsuperscript{76} \textit{See} notes 60-66 and accompanying text \textit{supra}. Thus instead of modifying their guidelines solely to incorporate judicial interpretations that expand NEPA, the CEQ could interpret NEPA directly and introduce new methods and procedures as they become feasible. This would increase coordination among agencies and shift the burden to the agencies to prove that the CEQ interpretation is not within the law.

\textsuperscript{77} 449 F.2d 1109 (D.C. Cir. 1971).

\textsuperscript{78} \textit{Id.} at 1113, 1123. Senator Jackson, discussing the balancing required by 102(B) stated: “Subsection 102(B) requires the development of procedures designed to ensure that all relevant environmental values and amenities are considered in the calculus of project development and decisionmaking.” 115 CONG. REC. 29055 (1969) (statement of Senator Jackson).

\textsuperscript{79} 449 F.2d at 1123.

\textsuperscript{80} Robinson v. Knebel, 10 E.R.C. 1097, 1100 (8th Cir. 1977) (Subparagraph 102(2)(B) does not require “specific assignment of dollar value to environmental factors, which are frequently not amenable to quantification, . . . if the impact statement otherwise
and follow procedures *reasonably* calculated to bring environmental factors to peer status with dollars and technology."\(^{81}\) This view is justified for practical reasons. To postpone all agency action pursuant to the development of precise mathematical formulas could prove overly restrictive.\(^{82}\) Reviewing courts, however, have demanded that an agency know of deficiencies in its quantification techniques and determine "whether any purpose would be served in delaying the project while awaiting the development of such criteria."\(^{83}\)

A weakness in this approach is that where an agency has been confronted repeatedly with similar quantification problems, it is unreasonable to allow that agency to evade the duties imposed by 102(2)(B) by claiming that valuation techniques are unavailable. Where it is shown that a problem has been seen in the past and will be confronted again in the future, a good faith duty to develop formulas for quantifying all environmental factors should be imposed.\(^{84}\)

\(^{81}\) Robinson v. Knebel, 10 E.R.C. 1097, 1100 (8th Cir. 1977); Cady v. Morton, 527 F.2d 786, 797 (9th Cir. 1975); Sierra Club v. Morton, 510 F.2d 813, 827 (5th Cir. 1975); Trout Unlimited v. Morton, 509 F.2d 1276, 1286 (9th Cir. 1974); Sierra Club v. Lynn, 502 F.2d 43, 61 (5th Cir. 1974); Environmental Defense Fund, Inc. v. Corps of Eng'rs, 492 F.2d 1123, 1133 (5th Cir. 1974).

\(^{82}\) All agency activity would come to a standstill. Cady v. Morton, 527 F.2d 786, 796 (9th Cir. 1975); Jicarilla Appache Tribe v. Morton, 471 F.2d 1275, 1280 (9th Cir. 1973); Environmental Defense Fund, Inc. v. Corps of Eng'rs, 325 F. Supp. 749, 758 (E.D. Ark. 1971), aff'd, 470 F.2d 289 (8th Cir. 1972).


\(^{84}\) For example, in 1971 this argument was made to the district court in Environmental Defense Fund v. Corps of Eng'rs, 325 F. Supp. 749, 757-58 (E.D. Ark. 1971). Even though the plaintiffs had presented evidence that it was possible to develop the necessary criteria, the court held that subparagraph 102(2)(B) does not require an agency and the CEQ to develop methods to quantify environmental factors. *Id.* A similar claim was again rejected by the district court in Environmental Defense Fund, Inc. v. TVA, 371 F.
3. Disclosure of Cost-Benefit Analysis

Where there is no available method for the precise valuation of environmental amenities, disclosure of the values assigned to items in the cost-benefit statement has been required. The method used in assigning values must be enumerated in sufficient detail to permit reasoned evaluation by the decisionmaker and allow informed criticism by challenging parties. Mere "conclusory statements that the benefit-cost ratio is justified" violates the subparagraph.

An important issue under subparagraph 102(2)(B) is whether the agency procedures "impinge upon environmental factors in such a way as might dilute the emphasis to be given these amenities." For example, the agency cannot add environmental benefits such as recreation into its cost benefit statement while leaving environmental costs unquantified. Once challengers have shown that the calculations used

Supp. 1004, 1012-13 (E.D. Tenn. 1973). The argument was stronger because plaintiffs asserted that the agency had had three and one-half years to develop methods, and testimony indicated that the procedures would be similar to those developed to quantify recreational benefits. The court only reiterated that mathematical equivalence was only necessary if a method already existed for its calculation. Seven years after the passage of NEPA, an agency's malfeasance should no longer be protected. If the rule of reason is to control, the court should not concentrate on what is reasonably within the agency's knowledge but what it could reasonably have been expected to discover or develop.


86. Daly v. Volpe, 514 F.2d 1106, 1112 (9th Cir. 1975); Sierra Club v. Morton, 510 F.2d 813, 827 (5th Cir. 1975); Trout Unlimited v. Morton, 509 F.2d 1276, 1286 (9th Cir. 1974). However, most cases do not require a strict cost-benefit analysis. See note 80 supra.

87. See, e.g., Sierra Club v. Froehlke, 359 F. Supp. 1289, 1366 (S.D. Tex. 1973); City of New York v. United States, 337 F. Supp. 150, 159 (E.D.N.Y. 1972). Contra, Robinson v. Knebel, 10 E.R.C. 1097, 1100 (8th Cir. 1977) (The court stated that "[w]hile portions of the discussion are couched in conclusory terms that are less than ideal, we cannot say that defendant did not adequately consider and weigh environmental factors in reaching its ultimate decision.").


89. Id. Problems also arise when an agency uses unreasonably high or low valuation rates, instead of current values, Cape Henry Bird Club v. Laird, 359 F. Supp. 404, 416 (W.D. Va. 1973), out-of-date information, Alabama v. Corps of Eng'rs, 411 F. Supp. 1261, 1270 (N.D. Ala. 1976), or low interest rates while calculating present value. Less clear is whether an agency could be forced to detail a range of possible cost-benefit ratios whenever any environmental values are left unquantified in order to reduce undue emphasis that might be attached if only a single ratio is provided.
are unusual or inconsistent with prior agency practices, the burden shifts to the agency to produce reasons for its valuations.90

Thus a general scheme governing cost-benefit analysis under subparagraph 102(2)(B) is discernible. Economic values must be assigned to environmental factors if procedures exist for doing so. Otherwise, both the deficiency and the costs and benefits used in the cost-benefit statement must be pointed out. Lack of quantification may be challenged if plaintiff suggests a reasonable method for assigning a value. Actual values assigned to environmental factors may be challenged if a showing is made that the agency valuation might deemphasize environmental amenities. The agency must then justify the figures or methods it has chosen to use.

4. Public Notice and Hearing

A final issue under subparagraph 102(2)(B) is whether public notice and hearing is required. In *Hanly v. Kleindienst*,91 plaintiffs claimed that 102(2)(B) required the Government Services Administration to hold public hearings before determining whether construction of a lower Manhattan civic center and attached jail would have a significant environmental impact.92 The Second Circuit recognized that neither statute nor administrative regulations required a hearing.93 It held, however, that a hearing may be necessary to ensure that all essential and relevant information was before the agency.94 The court added that "the necessity for a hearing will depend greatly upon the circumstances surrounding the particular proposed action and upon the likelihood that a hearing will be more effective than other methods in developing relevant information and an understanding of the proposed action."95 The precise procedural steps, *i.e.*, a formal hearing or "informal acceptance of relevant data," to be used was left to agency discretion.96

90. See, *e.g.*, Cape Henry Bird Club v. Laird, 359 F. Supp. 404 (W.D. Vir. 1973). In *Environmental Defense Fund, Inc. v. Corps of Eng'rs*, 492 F.2d 1123 (5th Cir. 1974), however, the Fifth Circuit considered a claim that the Corps was required to articulate the scale of values used by the agency to enable a reviewer to determine how the "trade-off" was made by the agency. *Id.* at 1133. The court never answered this specific claim but instead held that a good faith attempt to weight and weigh environmental values satisfied subparagraph 102(2)(B). *Id.*

91. 471 F.2d 823 (2d Cir. 1972).
92. *Id.* at 835-36.
93. *Id.* at 836.
94. *Id.* at 835-36.
95. *Id.* at 836.
96. *Id.*
A number of courts have considered the need for a hearing. In *Continental Illinois National Bank & Trust Co. v. Kleindienst*, the court held that the absence of a hearing was not a procedural defect and distinguished *Hanly v. Kleindienst* on its facts: no local sensibilities were affected since the detention center was not being built in a residential neighborhood and the complaint was not that the impact would be significant but that the plaintiffs wanted the fuller consideration provided by the EIS. Thus the significance of the impact was not controversial. Only the decision to continue with the project was found to be controversial.

In *Simmans v. Grant*, the court held that the Soil Conservation Service failed to use appropriate methods in not obtaining the opinions of affected citizens. The agency was engaged in a stream modification project and the relevant information to be gained from a public hearing was "the project's impact, if any, upon cattle raising and those persons dependent upon this pursuit for their economic well-being in the affected area."

The necessity for a public hearing under subparagraph 102(2)(B) depends upon potential environmental impacts of the proposed project and whether a hearing would produce information relevant to those impacts. Whenever the agency must take into account the impact of the project on affected citizens, the public is then an essential source of information on how they will be affected. Because CEQ Guidelines require an EIS whenever the significance of a project's impact is controversial, public participation is necessary to determine whether the magnitude of the impact is controverted or the agency has underrated concerns over impacts of known magnitudes. Note, however,
that if agency regulations call for public hearings, there is no need to establish that relevant information would be developed.

C. Subparagraph 102(2)(D)—Study, Development and Description of Appropriate Alternatives

Subparagraph 102(2)(D) provides:

(2) all agencies of the Federal Government shall—
   (D) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources. ¹⁰⁵

Although subparagraph 102(2)(C) requires a detailed statement on "alternatives to the proposed action,"¹⁰⁶ courts have recognized that subparagraph 102(2)(D) imposes further duties on agencies with respect to consideration of alternatives.¹⁰⁷ These duties may be satisfied in part by the discussion of alternatives in the agency’s EIS.¹⁰⁸ Indeed, compliance with subparagraph 102(2)(D) is often based solely on an examination of the EIS. The subparagraph is independent of the EIS

105. NEPA § 102(2)(D), 42 U.S.C. § 4332(D) (1970). NEPA was amended in 1975 to insert a subparagraph allowing responsibility for preparation of the EIS to be delegated to state officials upon certain specified conditions. This subparagraph was inserted as subparagraph 102(2)(D) and the remaining subparagraphs, 102(2)(D)-(H), were shifted down a letter. For the purposes of this Note, however, I have chosen to continue to refer to the subparagraphs by their original lettering. The majority of the cases cited, with one or two exceptions, use the old section numbers.


108. See, e.g., Environmental Defense Fund, Inc. v. Corps of Eng’rs, 470 F.2d 289, 296 (8th Cir. 1972) (Subparagraph 102(2)(D) "follows and is in addition to the § 102(2)(C) requirement of a detailed statement discussing . . . alternatives to the proposed action. This is not to suggest, however, that the more extensive treatment of alternatives required by § 102(2)(D) cannot be incorporated in the EIS."). An examination of cases in which discussion of it is challenged reveals that the vast majority were based upon review of an agency’s EIS or negative declaration.

http://openscholarship.wustl.edu/law_urbanlaw/vol14/iss1/7
requirement, however, and should be read as demanding an independent consideration of alternatives. The Second Circuit in *Trinity Episcopal School Corp. v. Romney* took this approach, stating: "Federal agencies must consider alternatives under § 102(2)(D) of NEPA without regard to the filing of an EIS and this obligation is phrased to encompass a broad type of consideration—'study, develop, and describe.'" Unlike subparagraphs 102(2)(A) & (B), 102(2)(D) requires that compliance be evidenced by a writing.

There are two basic issues involved in assessing compliance with this subparagraph. First, it must be determined which alternatives must be discussed. Second, it must be determined how thorough the discussion must be. Although agency compliance with 102(2)(D) is controlled by the rule of reason, it is of little value to merely state that reasonable consideration of reasonable alternatives is required in that courts have produced varying interpretations of reasonableness.

The starting point for many courts is the CEQ Guidelines detailing the consideration that must be given alternatives in the EIS.

A rigorous exploration and objective evaluation of the environmental impacts of all reasonable alternative actions, particularly those that might enhance environmental quality or avoid some or all of the adverse environmental effects, is essential. Sufficient analysis of such alternatives and their environmental benefits, costs and risks should accompany the proposed action through the

109. See note 107 supra. Independence is also implicit from two other sets of cases. The first set of cases imposes a duty of continuing study and review of alternatives on the agency even after the EIS for the project in question has been prepared. See note 155 infra and cases cited therein. Such a result could not occur if the study of alternatives were inextricably tied to impact statements. The second set of cases are those requiring a complete discussion of alternatives even though the agency had filed a negative declaration that their action would have no significant impact. See, e.g., Hanly v. Kleindienst, 471 F.2d 823, 834-36 (2d Cir. 1972); Simmans v. Grant, 370 F. Supp. 5, 17-18 (S.D. Tex. 1974); City of New York v. United States, 337 F. Supp. 150, 159 (E.D.N.Y. 1972).

110. 523 F.2d 88 (2d Cir. 1975).

111. Id. at 93. See Environmental Defense Fund, Inc. v. Corps of Eng'rs, 492 F.2d 1123, 1135 (4th Cir. 1974).

112. Subparagraph 102(2)(D) demands that the agency "describe" alternatives.

113. Subparagraph 102(2)(D) only requires that "appropriate alternatives" be described. In *Environmental Defense Fund, Inc. v. Corps of Eng'rs*, 492 F.2d 1123 (5th Cir. 1974), the Fifth Circuit found that all appropriate alternatives had been considered. *Id.* at 1135. Thus, "appropriate" can be used to limit the variety of alternatives that must be discussed. More generally, however, the subparagraph is subject to the rule of reason, adopted by the courts for all of the subparagraphs of section 102(2). See, e.g., *Environmental Defense Fund, Inc. v. Corps of Eng'rs*, 492 F.2d 1123, 1131 (5th Cir. 1974); *Natural Resources Defense Council, Inc. v. Morton*, 458 F.2d 827, 834 (D.C. Cir. 1972).
agency review process in order not to foreclose prematurely options which might enhance environmental quality or have less detrimental effects. . . . In each case, the analysis should be sufficiently detailed to reveal the agency's comparative evaluation of the environmental benefits, costs and risks of the proposed action and each reasonable alternative. . . .\textsuperscript{114}

A similar idea was stated in \textit{Calvert Cliffs} which interpreted the sub-paragraph to require that an agency consider "all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance."\textsuperscript{115} This interpretation accords with the general policy of NEPA that the agency must consider the environmental impacts of a project before it adopts a course of action.\textsuperscript{116} Ideally, an agency will not have a particular course of action in mind when it begins its preliminary studies. It would then examine the costs, benefits and environmental impacts of all reasonable means of achieving its primary goal and make the optimally beneficial decision. If the environmental costs are too great, it would abandon the project altogether. This study of alternatives has been called the "lynchpin" of NEPA's procedural requirements.\textsuperscript{117}

1. Necessary Alternatives

Generally, the alternatives considered must be far-reaching. \textit{Natural Resources Defense Council, Inc. v. Morton}\textsuperscript{118} involved the Department of the Interior's contemplated sale of oil and gas leases on the Outer Continental Shelf (OCS).\textsuperscript{119} In developing alternatives to the lease sale, the agency considered only those alternatives which it had the authority to implement.\textsuperscript{120} The District of Columbia Circuit rejected this attempt to limit the agency's duties and held that all reasonably availa-

\begin{itemize}
  \item \textsuperscript{114} CEQ Guidelines, 40 C.F.R. § 1500.8(a)(4) (1976).
  \item \textsuperscript{115} 449 F.2d 1109, 1114 (D.C. Cir. 1971).
  \item \textsuperscript{116} Senate Report, \textit{supra} note 2. The Senate Committee emphasized that the action-forcing provisions were designed to make environmental considerations an integral part of the agency decision-making process, not an after the fact justification for a decision already made.
  \item \textsuperscript{117} Monroe County Conservation Council, Inc. v. Volpe, 472 F.2d 693, 697-98 (2d Cir. 1972).
  \item \textsuperscript{118} 458 F.2d 827 (D.C. Cir. 1972).
  \item \textsuperscript{119} \textit{Id.} at 830-31.
  \item \textsuperscript{120} \textit{Id.} at 834, 838-39. The only alternatives the agency considered were eliminating those sales involving the highest environmental risks and withdrawing the sales completely. \textit{Id.}
\end{itemize}
ble alternatives must be considered even though new legislation or action by other agencies would be necessary to effectuate them.  

There is, nevertheless, some argument as to what constitutes a "reasonably available" alternative. In Morton, the court demanded inclusion of some remote and speculative alternatives, even though they might be impractical. Mention of these alternatives was held necessary since the agency must continue to review and develop possible alternatives. The court also held that partial solutions to problems must be included, so long as they might possibly reduce the environmental harm. While one court has held that alternatives which have been proven unsuccessful or would have "only a token effect on the over-all situation" need not be considered, identification of such alternatives assures a fresh look at new problems instead of reliance on old choices.

The burden of proof in showing that an alternative is reasonably available was discussed in Aeschliman v. NRC. The Commission determined that it would not consider energy conservation as an alternative to construction of a nuclear power facility because plaintiffs "had introduced no evidence demonstrating the feasibility of particular methods of energy conservation, much less evidence indicating that the proposed facility could be eliminated entirely." The District of Columbia Circuit rejected imposition of such a strict burden on persons proposing alternatives and stated that:

121. Id. at 834, 837.
122. Id. at 837-38. The court considered an alternative remote and speculative if it would require changes in the statutory authorization or policies of other agencies and those changes could not be effectuated before the primary agency needed to act. Id.
123. Id. at 836-37. Continuing review is necessary in case the alternative becomes available to reduce or eliminate adverse impacts with respect to the present project. The court also recognized that the time for development of the alternative is when the usefulness of the alternative becomes apparent since "their environmental consequences may be more germane to subsequent proposals for OCS leases, in light of changes in technology or in variables of energy requirements and supply." Id. at 837.
124. Id. at 836. The court held that the agency cannot "disregard alternatives merely because they do not offer a complete solution to the problem." Id.
126. The D.C. Circuit, in Aeschliman v. NRC, 547 F.2d 622 (D.C. Cir. 1976), cert. granted, 97 S.Ct. 1098 (1977) stated colorable alternatives must still be mentioned even though redundant or impractical, or for which no meaningful information is presently available. Id. at 628-29.
127. 547 F.2d 622 (1976).
128. Id. at 627.
129. Id. at 629-30.
. . . an intervenor's comments on a draft EIS raising a colorable alternative not presently considered therein must only bring 'sufficient attention to the issue to stimulate the Commission's consideration of it.' Thereafter, it is incumbent on the Commission to undertake its own preliminary investigation of the proffered alternative sufficient to reach a rational judgment whether it is worthy of detailed consideration in the EIS. Moreover, the Commission must explain the basis for each conclusion that further consideration of a suggested alternative is unwarranted.130

"Colorable alternatives" are "those reasonably calculated to reduce environmental harm while at the same time achieving major portions of the goals sought to be accomplished by the proposed action."131

Challengers may not always be required to suggest colorable alternatives in order to voice a valid claim. In Natural Resources Defense Council, Inc. v. NRC,132 the District of Columbia Circuit recognized that lack of objectivity in discussing alternatives may be a violation.133 In addition the court stated that "where apparently significant information has been brought to [the agency's] attention, or substantial issues of policy or gaps in its reasoning raised, the statement . . . must indicate why the agency decided the criticisms were invalid."134

130. Id. at 628. Energy conservation was considered a colorable alternative because the FPC had required its consideration in the past and experts agreed that it would "have an important . . . role in overall energy policy in the coming decades." Id. at 629.


Compare Life of the Land v. Brinegar, 485 F.2d 460 (9th Cir. 1973). In Life of the Land the Ninth Circuit reviewed alternatives proposed for eliminating noise pollution from an airport in Hawaii. The court rejected those alternatives proposed by plaintiffs because they would not alleviate the noise problem, had proved unsuccessful at other airports, and would have "only token effect on the overall situation." Id. at 470-73.

132. 547 F.2d 633 (D.C. Cir. 1976).

133. The court stated that "where only one side of a controversial issue is developed in any detail, the agency may abuse its discretion by deciding the issue on an inadequate record." Id. at 645-46.

A similar claim was made in Citizens Against Destruction of NAPA v. Lynn, 391 F. Supp. 1188 (N.D. Cal. 1975), in which plaintiffs claimed that alternatives were not considered because the EIS unequivocally supported HUD. Id. at 1195. The district court held, however, that plaintiffs hadn't met their burden of proof. Id. at 1196.


134. 547 F.2d at 646. The court believed that an agency abuses its discretion if it cannot point to "particulars in the record which, when coupled with its reservoir of expertise, supports its resolution of the controversy." Id.
court believed this heavy burden on the agency is required by NEPA in order to overcome the inevitable "institutional bias within an agency proposing a project."\(^{135}\)

In sum, agencies should be aware of alternatives that are reasonably available. Where comments are solicited from the public, as a practical matter, persons adversely affected by the project are likely to provide whatever imagination the agency lacks. The major concern, therefore, is not whether the agency included sufficient alternatives, but whether the agency discussion of those alternatives contains sufficient detail to fulfill the purpose underlying the subparagraph 102(2)(D) requirement.

2. Detailed Study of Alternatives

The purpose underlying the requirement that an agency study, develop and describe all reasonably available alternatives is to ensure that the decision-maker has sufficient data to make a reasoned choice between alternatives.\(^{136}\) A description of alternatives prepared for the decision-maker prior to adopting a proposal should contain equal consideration of all possible approaches to the problem.\(^{137}\) In considering how detailed the study of alternatives must be under section 102(D), courts will probably look to principles delineated in cases dealing with the scope of alternatives under section 102(C)’s EIS mandate. Few courts demand that an objective position be maintained by the agency in preparing all writings for consideration by the decision-maker. Violations have been found, however, if the "EIS usurps the Secretary's decision-making role by framing its discussion of alternatives so that, based on the EIS alone, only one decision is possible."\(^ {138}\) Courts have been satisfied with the consideration given to alternatives so long as each is "presented as thoroughly as the one proposed by the agency, each given the same weight so as to allow a reasonable reviewer a fair opportunity to choose between the alternatives."\(^ {139}\) Since an EIS accompanies a proposal, any analysis of alternatives in an EIS necessarily

135. Id.


ly emphasizes the agency's choice.\textsuperscript{140} Most courts, however, accept the EIS discussion of alternatives in satisfaction of subparagraph 102(2)(D) if the statement includes "the results of the [agency's] own investigation and evaluation of alternatives so that the reasons for the choice of a course of action are clear."\textsuperscript{141} In no event may the discussion be conclusory or uninformative—the agency must indicate the basis for its assertions.\textsuperscript{142}

Complete information concerning alternatives is not necessary since this requirement is limited by the rule of reason. Detailed discussion is unnecessary if the environmental effects of an alternative cannot be reasonably ascertained or if implementation of the alternative is too remote and speculative.\textsuperscript{143} The agency "need collect only as much data as will be necessary for the [agency] to determine that the alternative is either infeasible or warrants further attention. . . . If such a determination is made in good faith and without bias, then the collection of voluminous amounts of data is unnecessary."\textsuperscript{144} If all available alternatives have similar impacts then detailed discussion of each is not required.\textsuperscript{145}

\begin{itemize}
\item \textsuperscript{140} See NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C).
\item \textsuperscript{143} See notes 122-26 and accompanying text supra.
\item \textsuperscript{144} Cape Henry Bird Club v. Laird, 359 F. Supp. 404, 421-22 (W.D. Va.), aff'd, 484 F.2d 453 (4th Cir. 1973). For example, in City of North Miami v. Train, 377 F. Supp. 1264 (D.C. Fla. 1974), plaintiffs challenged the selection by EPA of ocean disposal for municipal waste for failing to adequately discuss a land disposal alternative. \textit{Id.} at 1269. The district court held that "the EPA was entitled to reject land application on the basis of the overriding environmental factors noted above without performing detailed on-site surveys." \textit{Id.} This position is just the sort of analysis intended by Congress in enacting subparagraphs 102(2)(A) & (B). See Calvert Cliffs' Coordinating Comm. v. AEC, 449 F.2d 1109, 1112-13 (D.C. Cir. 1971) (interpreting the statute to require that the agency consider abandonment of the project if the environmental costs far outweigh the potential economic or technical benefits).
\item \textsuperscript{145} Iowa Citizens for Environmental Quality, Inc. v. Volpe, 487 F.2d 849, 853 (8th Cir. 1973). In \textit{Iowa Citizens} an interstate highway section was complete except for one
\end{itemize}
A heavy burden is imposed on plaintiffs challenging the adequacy of detail and discussion given to alternatives. In *Environmental Defense Fund, Inc. v. Corps of Engineers*,\(^{146}\) the Corps' EIS for the Tennessee-Tombigbee Waterway was challenged for failing to develop the alternative of rail transportation.\(^{147}\) The Fifth Circuit stated that unless plaintiffs could demonstrate that railways could displace water carriage, the "appropriateness of such a transportation scheme . . . remains technically, economically, and ecologically speculative."\(^{148}\) The court thus refused to disturb the finding that alternatives had been duly considered.\(^{149}\) Similarly, in *North Carolina v. FPC*,\(^{150}\) the District of Columbia Circuit held that the Commission's consideration of "energy conservation" as an alternative to a power project was sufficient, based upon a statement in the EIS that demand for electricity would continue to rise despite "stringent conservation practices."\(^{151}\) The court justified this decision because the "parties raised only the most generalized concern about 'conservation of energy' in their petitions for rehearing and never specifically brought such matters as 'peak load pricing' to the Commission's attention."\(^{152}\) In *Aeschliman*,\(^{153}\) the same court read their opinion in *North Carolina v. FPC* to say that "if energy conservation generally were already being considered in an EIS, . . . [then challenges must] focus the Commission's attention on specific techniques."\(^{154}\) An agency's discussion of alternatives in an EIS can be challenged, therefore, only if plaintiffs investigate the alternatives and produce convincing evidence that the costs or benefits attributed to the alternative were incorrect or that technical feasibility was greater than assumed by the agency.

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short segment. Detailed discussion was unnecessary since the only real question was what farmland would be used.

146. 492 F.2d 1123 (5th Cir. 1974).
147. *Id.* at 1135.
148. *Id.* at 1136.
149. *Id.* at 1135.
150. 533 F.2d 702 (D.C. Cir. 1976).
151. *Id.* at 707. The impact on energy conservation was also discussed in the Commissioner's opinion denying a rehearing.
152. *Id.*
154. *Id.* at 629.
3. Continuing Review

If discussion of alternatives is limited to that included in the EIS, then the discussion of alternatives is limited to what can be developed and described by the time the EIS is filed. It is possible, however, to interpret 102(2)(D) to impose a continuing requirement to review alternatives. Under such an interpretation the agency must develop a meaningful analysis whenever the necessary data becomes reasonably ascertainable. This forces full development of alternatives at the earliest possible time. Analysis of politically speculative alternatives allows Congress to assess their possible benefits. Presently unascertainable environmental consequences may be revealed through subsequent studies, and thus a detailed comparison of all relevant alternatives may eventually be made. Expanded use of this concept would substantially increase the usefulness of subparagraph 102(2)(D) in insuring that the optimal course of action is adopted by the sponsoring agency.

D. Subparagraph 102(2)(G)—Initiating and Utilizing Ecological Information

Subparagraph 102(2)(G) provides:

(2) all agencies of the Federal Government shall—
   (G) initiate and utilize ecological information in the planning and development of resource-oriented projects.

This subparagraph has undergone little development by the courts. One early interpretation held that the subparagraph provides authority for agencies to undertake research in areas not traditionally within the scope of their jurisdiction. This promotes one purpose of NEPA, which is to authorize agency consideration of environmental factors where such authorization had previously been considered absent.


Only one reported case has found an agency in violation of subparagraph 102(2)(G). National Helium Corp. v. Morton\(^{159}\) involved a review of the Secretary of the Interior's action in canceling helium conservation contracts.\(^{160}\) The court held that the Interior Department's failure to participate in a study sponsored by the National Science Foundation on helium needs and reserves violated the agency's duties under subparagraph 102(2)(G).\(^{161}\) The court rejected the agency's defense that the studies were not brought to the agency's attention and that participation would have "jeopardized their status in pending litigation."\(^{162}\)

It should be clear that an agency cannot be content to rely on existing sources of ecological information, nor on ongoing studies initiated by others.\(^{163}\) If adequate information is not available, then the agency must initiate the studies itself. Thus the most important effect of this subparagraph is that it qualifies what constitutes reasonable efforts by an agency under subparagraphs 102(2)(B) and (D). An agency should not be able to avoid discussion of either the environmental effects of an action or available alternatives on the grounds that information is not presently ascertainable. The agency must initiate studies to try to develop the information before it can legitimately claim that all facts and relevant data have been considered.\(^{164}\)

III. CONCLUSION—NECESSITY FOR A BALANCED USE OF SECTION 102(2) ACTION-FORCING PROVISIONS

There are numerous advantages to utilizing the neglected subparagraphs of section 102(2). First, the "major Federal action" limitation on subparagraph 102(2)(C) does not limit the application of subparagraphs

\(^{160}\) Id.
\(^{161}\) Id. at 106.
\(^{162}\) Id.
\(^{164}\) For example, in Aeschliman v. NRC, 547 F.2d 622 (D.C. Cir. 1976), the D.C. Circuit held that the Commission could not reject a colorable alternative out-of-hand without first initiating preliminary studies designed to assess the feasibility of the alternative. Id. at 630. If the agency then determined that the alternative was technically and economically feasible and could be used to mitigate the environmental impact of other proposed methods of achieving the agency's primary goals, then the agency would have to give the alternative the complete discussion mandated by subparagraphs 102(2)(C)(iii), (D).
102(2)(A), (B), (D), & (G). Subparagraph 102(2)(A), for example, is triggered whenever an action "may" have an environmental impact.\footnote{165} Failure to comply with any of these provisions will be cause for an enforcement action. This assures adequate protection of environmental values regardless of a present supposition that no significant environmental harm will occur and that a complete EIS should be excused. For whatever reasons a court determines that an EIS will be unnecessary, it will seldom justify non-compliance with subparagraphs 102(2)(A), (B), (D) & (G).

Even if an EIS is prepared, these subparagraphs impose a \textit{continuing} responsibility to review the developing knowledge about environmental consequences of particular actions and adjust all existing projects "to the fullest extent possible" to minimize adverse environmental effects. In addition, the Supreme Court limitation in \textit{Kleppe v. Sierra Club}\footnote{166} is based solely upon language in subparagraph 102(2)(C) and thus imposes no limitation on the early applicability of the remaining subparagraphs.\footnote{167}

Cases holding that there is a clear and fundamental conflict between an agency's primary mission and the delay caused by NEPA were based on the delay inherent in preparing an impact statement.\footnote{168} Such delay is not present when complying with the remaining subparagraphs of section 102(2) because an agency may tentatively make a decision on a project, subject to modification once complete information on the environmental consequences is developed.

Whenever agencies are excused from preparation of an EIS, adverse environmental consequences will not be eliminated or even mitigated, the magnitude or extent of the impact will not be revealed to the public in general, unknown impacts will remain undiscovered and little useful knowledge will be made available for use by other agencies in discovering or evaluating man's impact on the environment. Whenever EIS preparation or judicial review of agency compliance is postponed, development of environmental information at the point in time when it may affect the agencies' decision or subjective commitment to a project cannot be insured nor can adverse impacts of the interim action be mitigated. Once an EIS has been filed and accepted, subparagraph

\footnotesize{
\begin{itemize}
  \item 166. 427 U.S. 390 (1976). See notes 18-19 and accompanying text \textit{supra}.
  \item 168. See notes 29-34 and accompanying text \textit{supra}.
\end{itemize}
}
102(2)(C) imposed no additional environmental duties on an agency unless an alteration in the plan constitutes a new major federal action. Thus no new information or technology must be considered by the agency even if it may still be incorporated into their decision. The procedures prescribed by these other subparagraphs are practical procedures designed to eliminate these weaknesses and should, themselves, be utilized “to the fullest extent possible” to challenge agency actions.