APPENDIX III

Additional Procedures Concerning OIRA Reviews Under Executive Order Nos. 12291 and 12498 [Revised]

June 13, 1986

MEMORANDUM FOR THE HEADS OF DEPARTMENTS AND AGENCIES SUBJECT TO EXECUTIVE ORDER NOS. 12291 AND 12498

From the time the President signed Executive Order No. 12291 on February 17, 1981, OMB has worked with the Departments and Agencies to develop and implement various procedures concerning the review of draft rules by the Office of Information and Regulatory Affairs (OIRA). We have also developed trial procedures and supported legislative proposals concerning our reviews as we have gained experience with these Executive Orders. For example last year, we implemented on a pilot basis with the Environmental Protection Agency additional procedures concerning OIRA's communications with persons outside the Federal Government.

We have also supported an American Bar Association Resolution that endorsed the President's regulatory review efforts and recommended that more information concerning our reviews be made available to Congress and the public.

The purpose of this memorandum is to advise you of additional procedures that we have determined, as a matter of administrative discretion, to implement concerning our review of draft rules under Executive Order No. 12291 and to set forth our policy on disclosure of agency regulatory program drafts under Executive Order No. 12498.

Current Procedures

These new procedures supplement our current procedures. As you are aware, Executive Order No. 12291 establishes certain procedures; the Administrative Procedure Act sets forth procedural and substantive requirements that govern agency action; other statutes establish procedures; and OIRA has adopted its own internal rules concerning its review of draft rules under Executive Order No. 12291. Furthermore, Departments and Agencies usually have established rules or practices to implement their rulemaking activities.

Attached to this memorandum are copies of some of the relevant materials concerning our reviews and procedures. Several of the most important features of these current procedures are:

Reviews Under Executive Order No. 12291

- Rules must meet statutory requirements. Executive Order No. 12291 reviews cannot result in rules not authorized by law or rules that do not carry out statutory requirements.
- Rulemaking decisions are made by agency heads. Executive Order No. 12291 makes it clear that the rulemaking authority of the agency head is not displaced by the Order.
- Rules must be based on the agency record. Executive Order No. 12291 cannot cause rulemaking decisions that are not supported by the agency rulemaking record. The law requires that all agency decisions must be rationally based on information in the agency record.
- Requirements of Executive Order No. 12291 apply only to the extent permitted by law. If there is a conflict between the Executive Order or the President's regulatory principles in Executive Order No. 12291 and the law, the law governs.

Current OIRA Procedures

- Only the Administrator and Deputy Administrator within OIRA (or someone specifically designated by them) may communicate with someone who is not employed by the Federal Government on regulations submitted to OIRA for review under Executive Order No. 12291.
- Written materials received from anyone not employed by the Federal Government are made available in OIRA's public reading room for review by the public.
- OMB has advised persons who wish to send us information about regulatory proposals to *send information to the rulemaking agency,* with a copy to us, so that the material may be made a part of the agency record.
- In general, OIRA provides *written reasons* to the agency whenever OIRA returns a regulation to an agency for further review because it is not

consistent with the President's regulatory principles.

- OIRA issues *full reports* annually on the disposition of all rules reviewed under Executive Order No. 12291, including a list of all returned rules.

New Procedures

1. OIRA will make available, upon written request made to OIRA after publication of an ANPRM or NPRM in the *Federal Register*, copies of any draft of the ANPRM or NPRM submitted for OIRA's review under Executive Order No. 12291;
2. Similarly, OIRA will make available, upon written request made to OIRA after publication of the final rule in the *Federal Register*, copies of any draft of the final rule submitted for OIRA's review under Executive Order No. 12291;
3. OIRA will make available, upon written request made to OIRA after the ANPRM, NPRM or the final rule is published in the *Federal Register*, all written correspondence concerning the draft submitted for OIRA's review under Executive Order No. 12291 that is exchanged between OIRA and the agency head. "Correspondence" means any documents exchanged between OIRA and the head of an agency.

These procedures are derived from provisions in S. 2433, as reported from the Senate Governmental Affairs Committee, with Administration support, in 1984. The Report on S. 2433 (No. 98-576, 98th Congress, 2d. Sess.) contains explanatory material as to how these provisions would have been interpreted had S. 2433 been enacted. We will be guided by that material in implementing these first three provisions.

4. OIRA will send EPA copies of all written material concerning EPA rules that OIRA receives from persons who are not employees of the Federal Government;
5. OIRA will advise EPA of all oral communications concerning EPA's rules, e.g., meetings, telephone calls, that OIRA (i.e., the Administrator and Deputy Administrator) has with persons who are not employees of the Federal Government; and
6. OIRA will invite EPA to all scheduled meetings with such persons concerning EPA's rules.

In May 1985, we instituted with EPA on a trial basis other procedures to better conform our Executive Order No. 12291 review procedures to EPA's somewhat unique internal procedures and statutory provisions concerning rulemaking. (See attached letter dated May 30, 1985, Attachment D.) These procedures are practical, and EPA believes that they are useful. This Memorandum revises those procedures with EPA and makes them a part of OIRA's current procedures.

(Note: These procedures do not apply to information collection requests under the Paperwork Reduction Act of 1980, even if such requests are a part of a proposed agency rule. Other procedures apply to such matters, see 5 CFR Part 1320.)

7. OIRA will apply these procedures (#4 through #6) to any other Department or Agency that is subject to Executive Order No. 12291 if that agency elects to institute these procedures, or any part of them.

Procedures #4 through #6 presently apply only to EPA. Although patterned upon EPA's statutory and internal procedures nonetheless, OIRA is prepared to extend these procedures to other agencies if the head of the agency so requests. A current list of agencies that have requested coverage will be maintained in the public reading room.

In addition,

8. OIRA will make available upon written request to OIRA made after the Regulatory Program is published, any agency draft submission sent to OIRA under Executive Order No. 12498. A copy will be available in the public reading room;
9. OIRA will continue to publish a complete annual accounting of Executive Order No. 12291 activities;
10. OIRA will make available upon written request to OIRA made after the end of a calendar month, a list of all draft ANPRMs, NPRMs and draft final rules for which OIRA has completed review under Executive Order No. 12291 during the preceding month (and the length of our review for each); and
11. OIRA will place in its public reading room: all written material received from persons outside the Federal Government concerning agency rules; a list of all meetings with persons outside the Federal Government pertaining to rules of an agency if that agency elects to participate in procedure #6; and a list of all other communications with persons outside the Federal Government pertaining to rules of any agency if that agency elects to participate in procedure #5.

Effective Date of New Procedures

The effective date of these new procedures is June 13, 1986, as explained below.

For purposes of new procedures #1 through #3, OIRA will make available in accordance with the conditions of those procedures, all drafts of the rule (and written correspondence referred to in procedure #3) if the review under Executive Order No. 12291 began on or after June 13, 1986, or was under review on that date. OIRA reviews of draft ANPRMs, NPRMs and final rules will be separate actions for purposes of disclosure. For example, copies of a draft NPRM under procedure #1 will be available in accordance with the conditions of procedure #1 after publication of the NPRM, if it was pending on or submitted after June 13, 1986, for review under Ex-

ecutive Order No. 12291. Disclosure of the draft NPRM would not be delayed until publication of a final rule. The reviews are distinct events for disclosure purposes. Similarly, if a review under Executive Order No. 12291 of a draft NPRM was completed prior to June 13, 1986, it would not be covered by these new procedures. Drafts of the final rule would be subject to procedure #2 if the final rule was pending on or submitted after June 13, 1986.

For purposes of procedures #4 through #6, the effective date will be the date of receipt of the request by the head of an agency to have these procedures apply. They apply as of June 13, 1986, for EPA. (Trial procedures with EPA have been effective since May 30, 1985.)

Procedure #8 will apply to drafts of the agency submissions for the *1986 Regulatory Program* and thereafter. The annual accounting referenced in procedure #9 is an appendix to the annual *Regulatory Program*. The lists referred to in procedures #10 and #11 will be available in OIRA's public reading room and upon written request on the 10th day of the month following the month for which the list is made. The first list will be available August 10, 1986. All written material pertaining to rules subject to Executive Order No. 12291 review received from persons not employed by the Federal Government as described in procedure #11 will be available within 3 to 5 days after receipt by OIRA.

These new procedures and OIRA's existing procedures are intended only to improve the internal management of the Federal Government, and are not intended to create any right or benefit, substantive or procedural, enforceable at law or in equity by a party against the United States, its agencies, its officers or any person.

WENDY L. GRAMM
Administrator
Office of Information
and Regulatory Affairs

Attachments

A — Department of Justice/OLC Opinion dtd 2/13/81
B — Executive Order No. 12291 (see Appendix II)
C — Executive Order No. 12498 (see Appendix I)
D — OIRA Procedures #3

Attachment A

February 13, 1981

MEMORANDUM

Re: Proposed Executive Order entitled "Federal Regulation"

The attached proposed Executive Order was prepared by the Office of Management and Budget in consultation with this Office, and has been forwarded for the consideration of this Department as to form and legality by the Office of Management and Budget with the approval of the Director. The proposed Order is designed to reduce regulatory burdens, to provide for presidential oversight of the administrative process, and to ensure well-reasoned regulations. The Order sets forth a number of requirements that Executive Branch agencies must adhere to in exercising their statutory rulemaking authority. We conclude that the Order is acceptable as to form and legality.

The Order has the following major provisions. Agencies must take action only if the potential benefits outweigh the social costs; attempt to maximize social benefits; choose the least costly alternative in selecting among regulatory objectives; and set priorities with the aim of maximizing net benefits. All of these requirements must be followed "to the extent permitted by law." The Order would require agencies to prepare for each "major rule" a Regulatory Impact Analysis (RIA) setting forth a description of the potential costs and benefits of the proposed rule, a determination of its potential net benefits, and a description of alternative approaches that might substantially achieve regulatory goals at a lower cost. Agencies would be required to determine that any proposed regulation is within statutory authority and that the factual conclusions upon which the rule is based are substantially supported by the record viewed as a whole. The Director of the Office of Management and Budget and the Presidential Task Force on Regulatory Relief would be given authority, *inter alia*, to designate proposed or existing rules as major rules, to prepare uniform standards for measuring costs and benefits, to consult with the agencies concerning preparation of RIAs, to state approval or disapproval of RIAs and rules on the administrative record, to require agencies to respond to these views (and to defer rulemaking while so consulting), and to establish schedules for review and possible revision of existing major rules. The Order would require agencies to defer rules that are pending on the date of its issuance, including rules that have been issued as final rules but are not yet legally effective, and to reconsider them under the Order. By its terms, the Order would create no substantive or procedural rights enforceable by a party against the United States or its representatives, although the RIA would become part of the administrative record for judicial review of final rules.

I. LEGAL AUTHORITY: IN GENERAL

The President's authority to issue the proposed Executive Order derives from his constitutional power to "take Care that the Laws be faithfully executed." U.S. Const., Art. II, § 3. It is well established that this provision authorizes the President, as head of the Executive Branch, to "supervise and guide" Executive officers in "their construction of the statutes under which they act in order to secure that unitary and uniform execution of the laws which Article II of the Constitution evidently contemplated in vesting general executive power in the President alone." *Myers* v. *United States,* 272 U.S. 52, 135 (1926).[1]

The supervisory authority recognized in *Myers* is based on the distinctive constitutional role of the President. The "take Care" clause charges the President with the function of coordinating the execution of many statutes simultaneously: "Unlike an administrative commission confined to the enforcement of the statute under which it was created . . . the President is a constitutional officer charged with taking care that a 'mass of legislation' be executed," *Youngstown Sheet & Tube Co.* v. *Sawyer,* 343 U.S. 579, 702 (1952) (Vinson, C.J., dissenting). Moreover, because the President is the only elected official who has a national constituency, he is uniquely situated to design and execute a uniform method for undertaking regulatory initiatives that responds to the

[1] In *Buckley* v. *Valeo,* 424 U.S. 1, 140-41 (1976), the Supreme Court held that any "significant governmental duty exercised pursuant to a public law" must be performed by an "Officer of the United States," appointed by the President or the Head of a Department pursuant to Art. II, § 2, cl. 2. We believe that this holding recognizes the importance of preserving the President's supervisory powers over those exercising statutory duties, subject of course to the power of Congress to confine presidential supervision by appropriate legislation. *See also* n. 7, *infra.*

will of the public as a whole.[2] In fulfillment of the President's constitutional responsibility, the proposed Order promotes a coordinated system of legislation, ensuring a measure of uniformity in the interpretation and execution of a number of diverse statutes. If no such guidance were permitted, confusion and inconsistency could result as agencies interpret open-ended statutes in differing ways.

Nevertheless, it is clear that the President's exercise of supervisory powers must conform to legislation enacted by Congress.[3] In issuing directives to govern the Executive Branch, the President may not, as a general proposition, require or permit agencies to transgress boundaries set by Congress. *Youngstown Sheet & Tube Co.* v. *Sawyer,* 343 U.S. 579 (1952). It is with these basic precepts in mind that the proposed Order must be approached.

We believe that an inquiry into congressional intent in enacting statutes delegating rulemaking authority will usually support the legality of Presidential supervision of rulemaking by Executive Branch agencies. When Congress delegates legislative power to Executive agencies, it is aware that those agencies perform their functions subject to Presidential supervision on matters of both substance and procedure. This is not to say that Congress never intends in a specific case to restrict Presidential supervision of an Executive agency; but it should not be presumed to have done so whenever it delegates rulemaking power directly to a subordinate Executive official rather than the President. Indeed, after *Myers* it is unclear to what extent Congress may insulate Executive agencies from Presidential supervision. Congress is also aware of the comparative insulation given to the independent regulatory agencies, and it has delegated rulemaking authority to such agencies when it has sought to minimize Presidential interference. By contrast, the heads of non-independent agencies hold their positions at the pleasure of the President, who may remove them from office for any reason. It would be anomalous to attribute to Congress an intention to immunize from Presidential supervision those who are, by force of Art. II, subject to removal when their performance in exercising their statutory duties displeases the President.

Of course, the fact that the President has both constitutional and implied statutory authority to supervise decisionmaking by Executive Branch agencies does not delimit the extent of permissible supervision. It does suggest, however, that supervision is more readily justified when it does not purport wholly to displace, but only to guide and limit, discretion which Congress has allocated to a particular subordinate official. A wholesale displacement might be held inconsistent with the statute vesting authority in the relevant official. See *Myers* v. *United States, supra,* at 135: "Of course there may be duties so peculiarly and specifically committed to the discretion of a particular officer as to raise a question whether the President may overrule or revise the officer's interpretation of his statutory duty in a particular instance." This suggestion is based on the view that Congress may constitutionally conclude that some statutory responsibilities should be carried out by particular officers without the President's revision, because such officers head agencies having the technical expertise and institutional competence that Congress intended the ultimate decisionmaker to possess.[4] Under this analysis, of course, lesser incursions on administrative discretion are easier to support than greater ones. This Office has often taken the position that the President may consult with those having statutory decisionmaking responsibilities, and may require them to consider statutorily relevant matters that he deems appropriate, as long as the President does not divest the officer of ultimate statutory authority.[5] Of course, the President has the authority to inform an appointee that he will be discharged if he fails to base his decisions on policies the President seeks to implement.[6]

A. The Order would impose requirements that are both procedural and substantive in nature. Procedurally, it would direct agencies to prepare an RIA assessing the costs and benefits of major rules. We discern no plausible legal objection to this requirement, which like most procedural requisites is at most an indirect constraint on the exercise of statutory discretion. At least as a general rule, the President's authority of "supervis[ion] in his administrative control," *Myers* v. *United States,* supra, at 135, permits him to require the agencies to follow procedures that are designed both to promote "unitary and uniform execution of the laws" and to aid the President in carrying out his constitutional duty to propose legislation. See U.S. Const., Art. II, § 3. We believe that a requirement that the agencies perform cost-benefit analysis meets these criteria. Further, the President's constitutional right to consult with officials in the Executive Branch permits him to require them to inform him of the costs and benefits of proposed action.[7] In our view, a requirement that rulemaking authorities prepare an RIA is the least that *Myers* must mean with respect to the President's authority to "supervise and guide" Executive officials.

[2] *See* Bruff, *Presidential Power and Administrative Rulemaking,* 88 Yale L.J. 451, 461-62 (1978).

[3] In certain circumstances, statutes could invade or intrude impermissibly upon the President's "inherent" powers, but that issue does not arise here.

[4] *Cf.* H. Friendly, The Federal Administrative Agencies (1962) (discussing concept of "agency expertise" as reason for delegation of power to particular agencies). The *Myers* Court reaffirmed, however, that even such officers may be dismissed at the pleasure of the President. 272 U.S. at 135.

[5] *See generally,* 1 Ops. Office of Legal Counsel Nos. 77-21, 77-56 (1977).

[6] *See* note 4 *supra.*

[7] *See* U.S. Const., Art. II., §2 (President may "require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any Subject relating to the Duties of their respective Offices").

B. Substantively, the Order would require agencies to exercise their discretion, within statutory limits, in accordance with the principles of cost-benefit analysis. More complex legal questions are raised by this requirement. Some statutes may prohibit agencies from basing a regulatory decision on an assessment of the costs and benefits of the proposed action. *See, e.g., EPA* v. *National Crushed Stone Ass'n,* 101 S. Ct. 295 (1980). The Order, however, expressly recognizes this possibility by requiring agency adherence to principles of cost-benefit analysis only "to the extent permitted by law." The issue is thus whether, when cost-benefit analysis is a statutorily authorized basis for decision, the President may require Executive agencies to be guided by principles of cost-benefit analysis even when an agency, acting without presidential guidance, might choose not to do so. We believe that such a requirement is permissible. First, there can be little doubt that, when a statute does not expressly or implicitly preclude it, an agency may take into account the costs and benefits of proposed action. Such a calculus would simply represent a logical method of assessing whether regulatory action authorized by statute would be desirable and, if so, what form that action should take. In our view, federal courts reviewing such actions would be unlikely to conclude that an assessment of costs and benefits was an impermissible basis for regulatory decisions.

Second, the requirement would not exceed the President's powers of "supervision." It leaves a considerable amount of decisionmaking discretion to the agency. Under the proposed Order, the agency head, and not the President, would be required to calculate potential costs and benefits and to determine whether the benefits justify the costs. The agency would thus retain considerable latitude in determining whether regulatory action is justified and what form such action should take. The limited requirements of the proposed Order should not be regarded as inconsistent with a legislative decision to place the basic authority to implement a statute in a particular agency. Any other conclusion would create a possible collision with constitutional principles, recognized in *Myers,* with respect to the President's authority as head of the Executive Branch.

C. We believe that the President would not exceed any limitations on his authority by authorizing the Task Force and the Director to supervise agency rulemaking as the Order would provide. The Order does not empower the Director or the Task Force to displace the relevant agencies in discharging their statutory functions or in assessing and weighing the costs and benefits of proposed actions.[8] The function of the Task Force and the Director would be supervisory in nature. It would include such tasks as the supplementation of factual data, the development and implementation of uniform systems of methodology, the identification of incorrect statements of fact, and the placement in the administrative record of a statement disapproving agency conclusions that do not appear to conform to the principles expressed in the President's Order. Procedurally, the Director and the Task Force would be authorized to require an agency to defer rulemaking while it responded to their views concerning proposed agency action. This power of consultation would not, however, include authority to reject an agency's ultimate judgment, delegated to it by law, that potential benefits outweigh costs, that priorities under the statute compel a particular course of action, or that adequate information is available to justify regulation. As to these matters, the role of the Director and the Task Force is advisory and consultative. The limited power of supervision embodied in the proposed Order is, therefore, consistent with the President's recognized powers to supervise the Executive Branch without displacing functions placed by law in particular agencies.

II. SUSPENSION OF PROPOSED AND FINAL REGULATIONS

The Order requires Executive Branch agencies (1) to suspend the effective date of rules that have been issued as final rules, but have not become legally effective; and (2) to reconsider rules that are proposed but have not yet been made final. After suspension of final rules, agencies must reconsider all such rules in accordance with the Order. These requirements are imposed only "to the extent permitted by law" and are thus inapplicable when a judicial or statutory deadline requires prompt action. Moreover, agencies must, in complying with these directives, adhere to the requirements of the Administrative Procedure Act (APA), 5 U.S.C. §551 *et seq.,* and all other laws.

For rules that have not yet been made final, the APA imposes no special procedural requirements. Agencies need not follow the notice and comment procedures of 5 U.S.C. §553, for nothing in that provision requires an agency to allow a period for comment on a decision to delay final adoption of a proposed rule. The agency's decision may, however, be subject to judicial review, and the agency may have to furnish a reasoned explanation for that decision. *See ASG Indust.* v. *CPSC,* 593 F.2d 1323, 1335 (D.C. Cir. 1979); *Action for Children's Television* v. *FCC,* 564 F.2d 458, 478-79 (D.C. Cir. 1977). The explanation here—that the agency needs time to prepare an RIA required by Executive Order—is, we believe, sufficient.

[8]The Paperwork Reduction Act of 1980, Pub. L. No. 96-511, 94 Stat. 2812, provides some implied statutory support for the Order by giving OMB a direct role in coordinating agency regulations that impose paperwork burdens on the public. With respect to non-independent agencies the Act gives the Director authority to disapprove "unreasonable" agency collection of information requests. §3504(h)(5)(C). The Act does not authorize him, however, to disapprove the accompanying rule itself insofar as the two are separable. *See* §3518(e); S. Rep. No. 930, 96th Cong., 2d Sess. 56 (1980).

The second category of regulations covered by the Executive Order raises somewhat different legal issues. Under 5 U.S.C. §553(b), notice and comment procedures must be followed for "rulemaking" unless "the agency for good cause finds (and incorporates the findings and a brief statement of reasons therefor in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." Under 5 U.S.C. §551(5), the term "rulemaking" is defined as "agency process for formulating, amending, or repealing a rule." The initial question, then, is whether an agency's decision to "suspend" a final but not effective rule is "rulemaking" which triggers the procedural safeguards of §553.

In a recent memorandum, this Office concluded that a 60-day suspension of the effective date of a final rule should not, in general, be regarded as rulemaking within the meaning of the APA.[9] We based our conclusion on "the clear congressional intent to give agencies discretion to extend the effective date provision beyond 30 days" and the absence of statutory language or history suggesting "that a delay in effective date is the sort of agency action that Congress intended to include within the procedural requirements of §553(b)." Nevertheless, we believe that a short-term suspension of the effectiveness of a final rule is not the equivalent of an indefinite suspension coupled with a process designed to review the basis for the rule, with a view to establishing a new rule. Although the former seems fairly characterized as a mere extension of an effective date under §553(d), the latter should probably be characterized as "agency process for formulating, amending, or repealing a rule" for purposes of §553(b).

The difference between these two measures for purposes of §553 becomes clear upon examination of the sequence of events that is expected to take place under each of them. Under the President's Memorandum of January 29, 1981, agencies are to defer the effective dates of final rules for sixty days in order to review them. The completion of that review will point to either of two dispositions. The rule might be allowed to take effect as published in final form, or it might be withdrawn for some proposed change. The first disposition would require no new procedures. The second disposition would surely contemplate an amendment or repeal of the earlier rule subject to §553's public procedures, but the earlier deferral of the rule's effective date would remain just that.[10]

Under the proposed Order, the situation is analogous to the second possible disposition under the President's Memorandum. The Order, by requiring careful cost-benefit analysis of rules through the RIA process, would contemplate notices of proposed rulemaking on the preliminary RIA and a reexamination of the rule at the appropriate time. The issue to be decided at the time the rule is suspended indefinitely for the Order's process to take place is whether the rule, which has already been promulgated in final form, should be allowed to have interim effect while it is under review by the agency. We believe that this decision is one of "formulating, amending, or repealing a rule" that requires either notice and comment procedures or good cause for dispensing with them under §553(b). Admittedly, the difference between a short deferral of the effectiveness of a rule and an indefinite suspension for reexamination is in part one of degree. But there is also a difference in kind: once a decision to begin the process of amending a rule is made, there is no longer a plausible argument that a rule that was to take effect is merely to be delayed for a brief period.

Notice and comment procedures on the issue of the interim effectiveness of a rule that is due to undergo reexamination under the Order should take the following form. The agency should defer the rule's effective date for a period sufficient to allow a short time for notice and comment, an opportunity for the agency to consider the comments and decide the issue of interim effectiveness, and an interval before the rule takes effect sufficient to meet the purposes of §553(d).

In deciding on the interim effectiveness of final rules subject to the Order's procedures, the final question is whether and under what circumstances agencies will have good cause to dispense with notice and comment procedures. Public procedures on interim effectiveness might be "unnecessary, impracticable, or contrary to the public interest," where the question whether there should be any rule at all was fully ventilated in the rule's comment process, or where it is clear that interim effect could impose substantial but short-term compliance costs. On the other hand, notice and comment might be needed where the rule's proponents had advanced substantial arguments for its early effectiveness, and where compliance costs are not likely to be wasted.

Such arguments must, of course, be assessed on a case-by-case basis. If the available record indicates that the costs of the rule at issue are not substantial and that the failure to allow the rule to become effective may itself be controversial, the likelihood that a court will require notice and public comment increases. The procedural requirements of the APA will, therefore, vary with the size and immediacy of the burdens imposed by the rule and the need for public comment on a decision to withdraw a final but not effective rule.

[9]Memorandum of January 28, 1981, for Honorable David Stockman, Director, Office of Management and Budget, from Larry L. Simms, Acting Assistant Attorney General, Office of Legal Counsel.

[10]Admittedly, one of the purposes of the 30-day effective date provision is to allow agencies to correct errors or oversights in final regulations. *See* Final Report, Attorney General's Committee on Administrative Procedure 114-15 (1941); *Sannon* v. *United States*, 460 F. Supp. 458, 467 (S.D. Fla. 1978). This purpose, however, does not suggest that agencies may make corrections, let alone withdraw rules, during the period between a rule's publication and its effective date without offering public procedures or showing good cause for dispensing with them. Proposed corrections—or even repeals—would of course be amendments for purposes of §553(b).

III. REGULATORY REVIEW BY AGENCY HEADS

Section 4 of the proposed Order would require agency heads to make express determinations that regulations they issue are authorized by law and are supported by the materials in the rulemaking record. These requirements are meant to assure agency compliance with existing legal principles that rules must be authorized by law, and that they should be adequately supported by a factual basis. Accordingly, we find no legal difficulty with them. In particular, they do not purport to change generally applicable statutory standards for judicial review of agency action, *see* 5 U.S.C. §706, and could not have such an effect. They also do not purport to alter any specially applicable standards, such as those concerning the evidentiary standard that must be met to uphold a given rule, appearing in statutes governing a particular agency.

On the other hand, the section would add the significantly new procedural requirements that agency heads expressly determine that the legal and factual requisites for a rule have been met. The first requirement reflects the principle, central to administrative law, that agency action must be guided by the "supremacy of law." *St. Joseph Stock Yards Co.* v. *United States,* 298 U.S. 38, 84 (1936) (Brandeis, J.). This principle protects against excess of power and abusive exercise of power by administrators. *See Report of the U.S. Attorney General's Comm. on Administrative Procedure, Administrative Procedure in Government Agencies,* S. Doc. No. 8, 77th Cong., 1st Sess. 76 (1941). The requirement that agency heads determine that a rule has "substantial support" in the materials before the agency means that a rule's necessary factual basis must be found to exist. This second requirement should not be confused with a "substantial evidence" standard of judicial review, which could be imposed only by statute. It embodies Recommendation 74-4 (subpart 3) of the Administrative Conference of the United States, 1 CFR §305.74.4, which urges that for a rule to be considered rational, it should be adequately grounded in a factual basis. This requirement is consistent with the approach of courts that have carefully reviewed agency action under the "arbitrary and capricious" standard of the Administrative Procedure Act, 5 U.S.C. §706(2)(A). *See, e.g., Ethyl Corp.* v. *EPA,* 541 F.2d 1 (D.C. Cir.) (en banc), *cert. denied,* 426 U.S. 941 (1976).

IV. JUDICIAL REVIEW

The Order states that it is not intended to create any rights or benefits enforceable by a party to litigation against the United States, its agencies, or any other person. At the same time, it provides that determinations of costs and benefits, and the RIA itself, are meant to form part of the agency record for purposes of judicial review. The effect of this provision is to preclude direct judicial review of an agency's compliance with the Order. The provision makes clear the President's intention not to create private rights, an intention that should be controlling here. *See Independent Meat Packers Ass'n* v. *Butz,* 526 F.2d 228 (8th Cir. 1975), *cert. denied,* 424 U.S. 966 (1976) (no judicial enforcement of Executive Order requiring consideration of inflationary impact of regulations, in part because such Order had not been issued pursuant to delegation from Congress); *Legal Aid Soc. of Alameda County* v. *Brennan,* 608 F.2d 1319 (9th Cir. 1979) (judicial review available of compliance with an Executive Order that had been ratified by Congress). Even without the provision, compliance with the Order would probably be immunized from review because the Order has not been promulgated pursuant to a specific grant of authority from Congress to the President and thus lacks the "force and effect of law" concerning private parties. *See Independent Meat Packers Ass'n* v. *Butz, supra; National Renderers Ass'n* v. *EPA,* 541 F.2d 1281, 1291-1292 (8th Cir. 1976); *Hiatt Grain Feed, Inc.* v. *Bergland,* 446 F. Supp. 457, 501-502 (D. Kan. 1978). The bar on judicial review of agency compliance with the Order does not, of course, prohibit a court from hearing a constitutional or statutory attack on the legality of the Order itself or of agency action taken pursuant to its requirements.

Because the regulatory impact analysis that will be required by the Order will become part of the agency record for judicial review, courts may consider the RIA in determining whether an agency's action under review is consistent with the governing statutes. This, of course, is true of all matters appearing in the rulemaking record.

V. CONCLUSION

The proposed Executive Order is acceptable as to form and legality.

Larry L. Simms
Acting Assistant Attorney General
Office of Legal Counsel

Attachment D

May 30, 1985

MEMORANDUM FOR OIRA STAFF

Subject: OIRA Procedures #3

The purpose of this memorandum is to remind you of the policies of the Office of Information and Regulatory Affairs under the Paperwork Reduction Act of 1980, Executive Order No. 12291, and Executive Order No. 12498, with respect to:

- records maintenance;
- public access to records; and
- meetings with the public.

These policies are intended to ensure that our responsibilities are discharged as efficiently and openly as practicable, consistent with both the law and the need for confidential communications between the President and his executive officers. Because OIRA's role in implementing the Paperwork Reduction Act is very different from its role in implementing Executive Order No. 12291 and Executive Order No. 12498, different procedures are necessary for our actions under each of these three programs. The differences derive primarily from the different authorities involved. The rules for Executive Order No. 12291 reviews will be applied to the Executive Order No. 12498 process to the extent they are relevant in that context.

BACKGROUND

OIRA's Role Under the Paperwork Reduction Act. In summary, the Paperwork Reduction Act requires OMB to review and approve or disapprove agency requests for information from the public. In this regard, the Paperwork Reduction Act essentially recodified the clearance authority that was originally assigned to OMB (actually the old Bureau of the Budget) by the Federal Reports Act of 1942.

OMB is responsible for determining whether agency information collection requirements meet the standards of the Act. Reviews under the Act determine whether the proposed information collection request is necessary for the proper performance of agency functions, including whether the information has "practical utility," whether it is too burdensome on respondents, and whether there is a need for the information. As a result, our actions may have legal, judicially reviewable consequences and must be based upon a complete record. The Act and our implementing rule specify the procedures that OIRA must follow. The bottom line is that we are responsible for ensuring that the record is complete and constitutes a justifiable basis for our decision, and that we adhere to the required procedures in developing the record and making our decision.

OIRA's Role Under E.O. 12291 and E.O. 12498. In contrast, our review under Executive Orders No. 12291 and No. 12498 derives from the President's constitutional authority over, and responsibility for actions taken by, his executive officers in carrying out the law. He has delegated his authority to review regulations to the Director of OMB. Thus, we conduct our reviews on behalf of the Director and the President.

In conducting an Executive Order review, OMB does not make final regulatory decisions—those are assigned by law to the heads of the respective agencies and must in all cases remain the regulatory agency's responsibility. The decision is made by the regulatory agency and the agency is accountable for both the adequacy of the record of its rulemaking and for justifying the substantive validity of the decision under the applicable statutes. We review the draft regulations of departments and agencies and advise whether the draft rules and their analysis meet the President's regulatory principles, as set forth in Executive Orders No. 12291 (Section 2) and No. 12498 (Section 1). As the Executive Orders note, our review is not intended to provide any third party with any procedural or substantive right concerning the regulations.

Since some regulations contain collections of information from the public, they are subject to our review and approval under the Paperwork Reduction Act as well as under Executive Order No. 12291.

THE DECISIONMAKING RECORD

The law generally requires that agencies must compile a record of materials that justify their rulemaking actions and that will serve as a basis for judicial review. The regulatory agency is also required under the Administrative Procedure Act to provide a concise general explanation for any regulations adopted by informal rulemaking and to explain, for example, significant substantive differences between an NPRM and a final rule, including new facts or data that the agency has relied upon.

For most rulemakings the law requires only that public comments on a proposed rule and certain un-

derlying scientific and empirical data be included with a text of the notice of proposed rulemaking and a final rule in the rulemaking record. The agency may, and usually does, include in a preamble to a rule other material in the record that is significant and relevant to the rulemaking. But the rule must be based upon and justified by the whole rulemaking record. Factual material that is not in the rulemaking record may not be used as a basis for supporting a rule.

For paperwork reviews, OIRA is the decisionmaking agency; *we* open and maintain that record. Our decision to approve or disapprove is based upon this record and must be justified by it. The record we compile is the material that may be reviewed as the law provides by the courts.

For reviews of regulations under Executive Orders No. 12291 and No. 12498, the agency is the decisionmaker; for judicial review, its rulemaking file, not factual material available to us, is the relevant material. In accordance with the Director's Memorandum of June 11, 1981 (attached), we make available materials we receive from the public to the regulatory agency so it may consider such material and include it in its records if it chooses to do so.

When we conduct reviews and give advice under the Executive Orders, we and the agencies treat our discussions in the same way we handle such consultation on other subjects—they are not generally disclosed. We will, however, make available upon request to the public all written information that we receive from any member of the public that we consider in our review, our final recommendation letter (if any) to the agency under E.O. 12291, and, of course, any material we submit for inclusion in an agency rulemaking record.

The following additional policies should be used as guidance in implementing our responsibilities under the Paperwork Reduction Act of 1980 and Executive Orders No. 12291 and No. 12498.

RECORDS MAINTENANCE

Each OIRA supervisor is responsible for ensuring that the relevant documents are placed in the proper files on matters under their supervision.

Any supervisor (including the Administrator and Deputy Administrator) who receives written comments directly from a member of the public will promptly send a copy of the comments to the appropriate Desk Officer.

Any comments that would otherwise be included in the public record but for which the commentor proposes to limit public access should not be accepted without the approval of the Deputy Administrator. Jim MacRae is responsible for periodic review and disposition of all files for the purpose of retention, storage, or destruction, in accordance with the policies set forth below. Except in unusual circumstances, all documents that are not required by law to be retained should be disposed of when the documents that are required to be retained are transferred to the Federal Records Center.

- *Paperwork Reduction Act of 1980*
  - — Because the written materials in our dockets are the documentary basis for our paperwork decisions and also constitute a basis for the public to review and comment to us on the proposed agency action, paperwork clearance dockets must be kept accurate, timely, and complete. To that end, Desk Officers should place in the docket, promptly after its receipt at OMB, any material that should be in the record.
  - — The record should include the following material:
    - – Agency proposal and any revisions;
    - – OMB worksheet;
    - – All written comments from the public and other government agencies;
    - – Evidence of final OMB action.
  - — After final action (approval or disapproval), the record should be retained in the reading room for at least 6 months. At least twice a year the Reports Management staff will review the files and send to the Federal Records Center all records for which final action has been completed for at least six months. The records will be classified as "temporary" for the Federal Records Center.

- *Executive Order No. 12291*
  - — Because the head of the regulatory agency, not OMB, is the decisionmaker on all rulemaking issues that come to us under E.O. 12291, we will routinely make available to the appropriate regulatory agency copies of all written materials that we receive from members of the public during the rulemaking proceeding and that are relevant to a particular informal rulemaking.
  - — The Desk Officer should also send to the public reading file within three days after receipt a copy of any such comments received from members of the public.
  - — The Desk Officer should send a copy of the final OMB written recommendation to the agency (if any) to the public reading file within three days after transmittal to the agency.
  - — The following material will not be made public, but, in addition to the final written OMB recommendations/views to the agency (if any), will be retained as part of the regulatory files:
    - – draft and proposed agency materials;
    - – OMB worksheets; and
    - – internal OMB and interagency documents as described by 5 U.S.C. 552(b)(5).

— After completion of the OIRA review, the regulatory files should be retained for at least six months. At least twice a year, the Reports Management staff, assisted by the other Branches, will review the files and segregate all files for which the reviews have been completed for at least six months. All files of rules that were "consistent, with no change" will be sent to the Federal Records Center. All other files will be retained within the NEOB for one year, then sent to the Federal Records Center. All files sent to the Federal Records Center will be classified as "temporary."

PUBLIC ACCESS TO OUR DOCKETS AND RECORDS

FOIA requests should be handled in accordance with OMB FOIA procedures. In addition, we have customarily made our paperwork dockets and written information from the public available for inspection.

Notwithstanding the increased Secret Service security precautions in the New Executive Office Building, we must continue to make access to our public records as simple as possible. All clearances should be arranged through Jim MacRae's office, ext. 6880.

To avoid confusion and misunderstanding, visitors should be told at the time clearance is sought that their clearance is limited to the public reading room. If the individual who has been cleared does not arrive at the reading room shortly after their scheduled clearance time, Jim MacRae should be notified. Jim will alert the Secret Service, which will take appropriate action. We cannot permit individuals who are cleared into the building for the reading room to roam through the building.

- *Paperwork Reduction Act of 1980*

— Current and recent records of paperwork clearance actions will be maintained in such a way as to be readily accessible to members of the public (with exceptions as provided in 5 CFR 1320.18). These files, which are the complete and official record for clearance purposes, will be kept in NEOB 3201, the reading room. They will be accessible to the public during normal business hours—9:00 am–5:30 pm.

- *Executive Order No. 12291 and No. 12498*

— We will maintain two types of documents in our public files relating to regulatory reviews—all comments received from any member of the public, and all our final recommendation letters to agencies under Executive Order No. 12291. These files will also be accessible to the public in the reading room during normal business hours.

MEETINGS WITH MEMBERS OF THE PUBLIC (including telephone contacts)

- *Paperwork Reduction Act of 1980*

— Any Desk Officer or supervisor may meet with members of the public to discuss and receive data and facts that are relevant to a paperwork clearance decision.

— Consistent with the policies of this memorandum and available time, OIRA staff must be equally accessible to all members of the public.

— In making our paperwork decision, we will consider only information that we receive *in writing*. The OIRA staff should make this policy clear during any conversation with members of the public, and should advise them to submit their comments in writing to *both* OMB and the agency concerned.

— OIRA staff may provide the public with information regarding the status of our paperwork decisionmaking process and the material and factual basis of our review, but should refrain from discussing their views of the issues or speculating on the outcome of the review.

— If an information collection requirement is contained in a proposed rule, any discussion with members of the public must be limited exclusively to the information collection request.

— Other procedures concerning paperwork reviews are set forth in 5 CFR 1320 and the Act itself.

- *Executive Orders No. 12291 and No. 12498*

— Inquiries from persons outside of the executive branch about regulatory matters under Executive Orders No. 12291 and No. 12498 shall be referred to the Deputy Administrator's Office or the appropriate agency.

— Consistent with the policies of this memorandum and available time the Administrator and Deputy Administrator will be accessible to all members of the public.

— No one within OIRA except the Administrator or Deputy Administrator will meet or talk with members of the public on Executive Orders No. 12291 and No. 12498 matters, unless specifically authorized by the Administrator or Deputy Administrator.

— Members of the public should be advised to submit their comments in writing to the appropriate agency if they wish to submit them to OMB, as provided in the Director's letter of June 11, 1981. They should also be advised that any materials submitted to us will be made part of the public file and made available to the appropriate agency.

ROBERT P. BEDELL
Deputy Administrator
Office of Information
and Regulatory Affairs

June 11, 1981

MEMORANDUM FOR HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

Subject: Certain Communications Pursuant to Executive Order 12291, "Federal Regulation"

Regulatory relief is one of the cornerstones of President Reagan's program of economic recovery. As an important step in achieving regulatory relief, on February 17, 1981, the President issued Executive Order 12291, "Federal Regulation." This memorandum explains how the Presidential Task Force on Regulatory Relief and the Office of Management and Budget (OMB) will communicate with the public and the agencies regarding proposed regulations covered by E.O. 12291. It also describes certain obligations of the public and agencies in this regard.

A major purpose of the Executive Order is to ensure that, to the extent permitted by law, regulatory decisions are based upon sound analysis of the potential consequences. Toward this end, a comprehensive factual basis is essential to assist agencies and other interested parties in assessing the economic and other ramifications of proposed regulations.

Under the Executive Order, both the Task Force and OMB will be reviewing factual materials related to regulatory proposals. Both the public and the agencies should understand that the primary forum for receiving factual communications regarding proposed rules is the agency issuing the proposal, not the Task Force or OMB. Factual materials that are sent to the Task Force or OMB regarding proposed regulations should indicate that they have also been sent to the relevant agency. Pursuant to this policy, the Task Force and OMB will regularly advise those members of the public with whom they communicate that relevant factual materials submitted to them should also be sent to the agency for inclusion in the rulemaking record. Accordingly, agencies receiving such materials from the public should take care to see that they are placed in the record.

On occasion, the Task Force staff and OMB will receive or develop factual material which they believe should be considered by an agency during a particular informal rulemaking. In accordance with advice provided by the Department of Justice, such material, when submitted to an agency for its consideration, will be identified as material appropriate for the whole record of the agency rulemaking.

Two additional matters should be noted. First, our procedures will be consistent with the holding of and policies discussed in *Sierra Club* v. *Costle,* No. 79-1565, slip op. at 212-20 (D.C. Cir. April 29, 1981). Second, these procedures apply only to informal rulemaking proceedings and are not in any sense intended to affect the more stringent ex parte rules applicable to agency adjudications and formal rulemakings. (Such proceedings are expressly intended by Congress to be more in the nature of formal judicial proceedings and involve bars against various forms of ex parte communication.)

David Stockman
Director
Office of Management and Budget

May 30, 1985

MR. A. JAMES BARNES
Deputy Administrator
Environmental Protection Agency

In recent discussions, you have asked us to review our present practices to ensure that factual information pertaining to EPA's rulemaking activities that is made available to us by members of the public is also made available to EPA in a timely manner.

We have reviewed our procedures and we believe that our general policies and practices under Executive Order No. 12291 are sound. However, in response to your request, we would propose certain additional procedures, beyond our existing policies and practices, which, if they are acceptable to you, we would be willing to undertake on an experimental basis.

Background

Our existing procedures implement guidance provided to us by the Attorney General in an opinion of April 24, 1981, entitled "Contacts between OMB and Executive Branch Agencies Pursuant to Executive Order 12291." It complements an earlier analysis by the Attorney General of the legal basis of the Executive Order (Memorandum re: Proposed Executive Order entitled "Federal Regulation," dated February 13, 1981). Both opinions of the Attorney General are enclosed (Tabs A and B).

The earliest of these two opinions of the Attorney General concluded that Executive Order No. 12291, which established the regulatory review process administered by the Office of Information and Regulatory Affairs was a lawful exercise of the President's Constitutional authority—

> "to 'supervise and guide' Executive Officers in 'their construction of the statutes under which they act in order to secure that unitary and uniform execution of the laws which Article II of the Constitution evidently contemplated in vesting general executive power in the President alone' *Myers* v. *United States*, 272 U.S. 52, 135 (1926)."

The second opinion of the Attorney General of April 24, 1981, concluded, in part that:

- The Office of Information and Regulatory Affairs, to which the authority of the Director of OMB under Executive Order No. 12291 has been delegated, "may freely contact agencies regarding the substance of proposed regulations, and may do so by way of telephone calls, meetings, or other forms of communication unavailable to members of the public."
- "[D]isclosure obligations, if any, lie with the rulemaking agency and not with [OIRA]."
- "[OIRA] is therefore under no legal disability with respect to contact with rulemaking agencies. At most, [OIRA] could adopt procedures as a matter of policy to assist the agencies in complying with our recommendation or with rules fashioned by the agencies themselves" (p.4).

This opinion, written before the seminal decision of the United States Court of Appeals for the District of Columbia Circuit in *Sierra Club* v. *Costle*, 657 F.2d 298 (1981), concluded that the judicial decisions issued until that time were "confused" as to whether an agency must include in its rulemaking record for judicial review factual information received by the agency from officials of the Executive Office of the President (EOP). The Attorney General therefore recommended that agencies include such factual information in their records in order to avoid the possibility of judicial reversal. The Attorney General did not, however, require or recommend inclusion of communications under the Executive Order that form part of the agency's deliberative process, i.e., legal and policy arguments, analyses of the facts, and factual data that cannot reasonably be segregated from deliberative material.

To implement the recommendations of the Attorney General, OMB Director David A. Stockman issued a Memorandum for the Heads of Executive Departments and Agencies on June 11, 1981, entitled "Certain Communications Pursuant to Executive Order No. 12291, 'Federal Regulation'" (Tab C). That Memorandum emphasized "that the primary forum for receiving factual communications regarding proposed rules is the agency issuing the proposal, not the Task Force or OMB."

This emphasis on the agency as the forum for receiving factual communications merely reflects, of course, the fact that the Executive Order does not divest an agency head of authority provided by law or the legal requirement that agency rules must be based upon the rulemaking record.

Since these procedures were implemented, the court's decision in *Sierra Club* has clearly established the propriety of contacts between EOP officials and agencies concerning rulemaking—indeed, it has demonstrated their importance for proper policy guidance of this critical aspect of government activity—and demonstrated that the procedures recommended by the Attorney General and implemented by the Director's Memorandum go well beyond what is required by law.

Written Materials from Persons Outside the Executive Branch

The Director's Memorandum provided that:

- Factual materials that are sent to the Presidential Task Force on Regulatory Relief or OIRA regarding proposed regulations should indicate that they have also been sent to the relevant

agency. Pursuant to this policy, the Memorandum noted that the Task Force and OIRA would regularly advise those members of the public with whom they communicated that relevant factual materials submitted to them should also be sent to the agency for inclusion in the rulemaking record.

— Accordingly, agencies receiving such materials from the public should take care to see that they are placed in the record.

— On occasion, the Task Force staff and OIRA would receive or develop factual material that they believed should be considered by an agency during a particular informal rulemaking. The Memorandum provided that, in accordance with advice provided by the Department of Justice, such material, when submitted to an agency for its consideration, would be identified as material appropriate for inclusion in the record of the agency rulemaking.

To further implement the recommendations of the Attorney General, OIRA established additional procedures, as a matter of policy, beyond the requirements of law and the recommendations of the Attorney General. Thus, we have uniformly and consistently made available to Members of Congress, the agencies, and the public copies of documents concerning an agency rulemaking that we have received from persons who are not officials or employees of the executive branch. We also strive to maintain copies of all such documents in our materials that are available for public review.

In addition to such materials being lodged in our public files and copies being made available upon request, you have asked whether copies of such documents that pertain to EPA rules could be routinely sent to EPA to help ensure that such materials are included, if appropriate, in EPA rulemaking dockets. In order to accommodate you, we will send to the General Counsel of EPA copies of all such documents that we receive from persons outside the executive branch. We will seek to provide these copies within five working days of their receipt in OIRA.

Non-written Communications with Persons Outside the Executive Branch

As you know, our practice with regard to non-written communications with persons outside the Federal Government, e.g., telephone calls and meetings, is to constrain communications that pertain to proposed agency rules. Only the Administrator and I (or OIRA employees specifically authorized by us in unusual circumstances) are authorized to communicate with persons outside the Federal Government on the substance (as opposed to the status) of rules that are subject to review under Executive Order No. 12291. These restrictions also apply to our review of rulemaking activities pursuant to Executive Order No. 12498. These restrictions do not apply to the other functions and activities of OIRA, such as our review of information collection requests under the Paperwork Reduction Act of 1980, even if an information collection request is contained in a proposed rule. In this latter circumstance, different procedures apply. See 5 CFR Part 1320 (Tab D) and OIRA Procedures Memorandum #3 (Tab E). The limitations noted above do, however, apply to the parts of a rule that do not contain an information collection request.

Obviously, senior officials in OIRA must be able to communicate freely with members of the public and persons within the Federal Government, just as the senior officials in EPA do.[1] We have, however, limited such communications essentially to the Administrator and Deputy Administrator. Furthermore, even Doug and I usually do not communicate with persons outside the Federal Government on proposed agency rules while they are under review pursuant to Executive Order No. 12291.

Notwithstanding these procedures applicable to all rules subject to the Order, you have asked whether specific additional procedures could be fashioned to apprise EPA of factual information that becomes available to us as a result of non-written communications with persons outside the Federal Government and that pertain to proposed EPA rules. Before describing what we believe is appropriate, it is useful first to deal with an approach we have rejected and the reasons why.

"Logging"

Although you have not suggested it, we believe that a general "logging" program or some variant thereof, particularly between and within executive agencies and entities, would not be an acceptable solution and would, as a general matter, be bad policy. The Attorney General's opinion of April 24, 1981, confirms this at pages 7-9 (Tab A). This view is also reflected in *Sierra Club* v. *Costle*, 657 F.2d 298, 404-408 (1981); prior congressional consideration of the issue (see pp. 3-4, Tab A); and, EPA's own stated position on the matter (Tab F).

In a nutshell, here is why we think a general "logging" system is a bad idea.

- It is unnecessary. There would be no adverse legal consequence even if we were to have information that is not in the agency record. An agency rule must be based on material in the

[1] As the court stated in *Sierra Club* v. *Costle*, "Under our system of government, the very legitimacy of general policymaking performed by unelected administrators depends in no small part upon the openness, accessibility, and amenability of these officials to the needs and ideas of the public from whom their ultimate authority derives, and upon whom their commands must fall. . . .Furthermore, the importance to effective regulation of continuing contact with a regulated industry, other affected groups, and the public cannot be underestimated. Informal contacts may enable the agency to win needed support for its program, reduce future enforcement requirements by helping those regulated to anticipate and shape their plans for the future, and spur the provision of information which the agency needs." 657 F.2d 298, 400-1 (1981).

record. Since EPA cannot rely on information it does not have to support a rule, see 657 F.2d 401, factual information that might be available to us from persons outside the Federal Government, that is not also made available to EPA, is not pertinent. Furthermore, an agency has no use for who-talked-to-whom entries.

- Imposition of a logging requirement would improperly interfere with the communication of policy views within the executive branch and the deliberative process itself. The court in *Sierra Club* rejected this approach. This was also a basis for Congress' rejection of the proposal to apply "ex parte" requirements to informal rulemaking. See pages 3 and 4 of Tab A, particularly footnotes 5-8.
- It is contrary to the "legislative model" of informal rulemaking[2] adopted by the Congress.
- It would divert attention from whether the agency's decision is a good one—the substantive issue—to how the agency made the decision.
- It would establish a paperwork blizzard if all participants in all discussions were required to "log" all communications on the thousands of rules considered every year. This would be nothing short of a bureaucratic nightmare to administer.
- A "logging requirement" would be impossible to "define." When would it begin? Who would it cover? When would it end? What would it consist of? There are neither practical nor principled answers to these questions.
- Such a procedure would logically require the agency to log all of its internal deliberative discussions also—a practical impossibility.

[2]Where agency action resembles judicial action, where it involves formal rulemaking, adjudication, or quasi-adjudication among "conflicting private claims to a valuable privilege," the insulation of the decisionmaker from *ex parte* contacts is justified by basic notions of due process. But where agency action involves informal rulemaking of a policymaking sort, the concept of *ex parte* contacts is of more questionable utility.

Additional Procedures

Nonetheless, in order to increase the amount of factual information that is available to EPA for its rulemaking decisions, and to respond to your request, we propose the following procedure which, if acceptable to you, we would try for a period of time and then reassess with you.

Whenever the Administrator or I have a meeting or a telephone call with a person outside of the executive branch concerning a proposed EPA rule subject to Executive Order No. 12291, and that meeting or telephone call provides factual information that we are not confident has also been provided to EPA, either the Administrator or I will call the General Counsel of EPA and advise him of the communication and of the relevant factual information. EPA can then do whatever it deems appropriate with regard to the information reported to the General Counsel. Furthermore, with respect to scheduled meetings, if any, we will try for a period of time and for a few rulemakings to provide an opportunity for senior officials of EPA to attend and participate, if they choose to do so. After some experience, we will reassess this procedure, as well.

Please let me know if you believe that we should initiate these procedures.

ROBERT P. BEDELL
Deputy Administrator
Office of Information and Regulatory Affairs

Enclosures

APPENDIX IV

Executive Order No. 12291 Annual Report for 1987

TABLE OF CONTENTS

Exhibits

I. INTRODUCTION

This report provides information on the implementation of President Reagan's Executive Order No. 12291 for the year ending December 31, 1987. It also describes trends in regulatory activity during the past decade.

Executive Order No. 12291, signed on February 17, 1981, established within the Executive branch a mechanism for improving Federal regulatory activities. The purposes of the Executive Order are to control the growth of Federal regulation and to ensure that individual regulations are well reasoned, economically sound, and coordinated with the policies of other agencies. In particular, the Order requires that all new regulations, to the extent permitted by law, adhere to the following principles:

- Agencies must base regulations upon adequate information concerning the need for and the consequences of the proposed action.
- Agencies must not issue regulations unless the potential benefits to society outweigh the potential costs to society.
- Of the alternative approaches to a given regulatory objective, an agency must select the alternative involving the least net cost to society.

To ensure compliance with these principles, the President ordered executive agencies to submit all proposed and final regulations to the Office of Management and Budget (OMB) for review before publication.

These review policies and procedures are conducted within statutory authorities. The Executive Order guides Federal regulatory officials in exercis-

ing the discretion given them by statute. This statutory discretion is often very broad, and may be ambiguous or contradictory, but may be exercised only to the extent permitted by law. Where statutes clearly exclude economic considerations by their terms, any Executive-Order policies to the contrary are overridden. The Order applies to general policymaking, such as "informal rulemaking" under the Administrative Procedure Act. It does not apply to adjudicatory proceedings.

This is the seventh annual report on the Order's implementation. Section II describes the requirements and procedures of the Order. Section III presents detailed information on the types of rules reviewed and the types of actions taken by OMB in 1987. Comparisons are then made between 1987 data and those of 1981 through 1986. Section IV examines the nature and extent of regulatory activity since 1977 by analyzing certain statistics of *Federal Register* activity.

II. IMPLEMENTATION OF THE EXECUTIVE ORDER

The Office of Information and Regulatory Affairs (OIRA) in OMB oversees agency compliance with Executive Order No. 12291. OIRA seeks to ensure, on a day-to-day basis, that agency regulatory activity reflects the President's regulatory policies described in the Order.

OIRA reviews "major" regulations with special attention. Regulations so designated have economic costs of over $100 million annually, or are projected to have significant effects on employment, inflation, or industry viability. A regulatory impact analysis (RIA) must accompany major regulations at both proposed and final rulemaking stages. An RIA assesses the costs and benefits of the action and its alternatives. OMB may waive the RIA requirement in special cases—for example, in order to expedite publication of an emergency regulation. Agencies must submit major proposed rules to OMB at least 60 days before publication, and major final rules at least 30 days before publication.

Executive agencies must transmit nonmajor regulations to OMB at least 10 days prior to planned publication. Executive Order No. 12291 does not require agencies to prepare RIAs for nonmajor actions, but it does require agencies to assure that their rules are consistent with the Executive Order's principles, to the extent permitted by law. Many agencies perform an initial analysis of the economic impact of nonmajor rules if they believe the rule will have a significant effect, or if it will be useful in assessing the impact.

III. REVIEW OF REGULATIONS

A. Types of Rules Reviewed in 1987

OMB reviewed 2,314 agency rules in 1987 under Executive Order No. 12291. Nine agencies accounted for 78 percent of the rules reviewed (see Exhibit 1). These agencies were: the Department of Agriculture (420 rules), the Department of Health and Human Services (314 rules), the Environmental Protection Agency (205 rules), the Department of Transportation (202 rules), the Department of the Interior (186 rules), the Department of Education (174 rules), the Department of Commerce (134 rules), the Office of Personnel Management (97 rules), and the Department of Justice (84 rules).

Exhibit 2 shows the number of rules reviewed during 1987 by each agency. Rules are classified as either proposed or final, and either major or nonmajor. Of the rules OMB reviewed in 1987, 47.3 percent were proposed and 52.7 percent were final. Major rules constituted only 3 percent of all rules. Nonmajor final rules were the predominant type of rule reviewed, constituting 51.4 percent of the total of all rules reviewed. The Environmental Protection Agency had the largest number of major proposed rules (12), followed by the Department of Agriculture (11), and the Department of Labor (3). The Department of Agriculture had the largest number of major final rules (8), followed by the Environmental Protection Agency (7). Exhibit 3 lists by name all major proposed and final regulations reviewed in 1986.

Exhibit 4 displays changes over the last 7 years in the types of rules reviewed. The total number of rules OMB reviewed in 1987 rose 15.4 percent from 1986 but was 17.5 percent lower than the number reviewed in 1981. The number of proposed rules in 1987 increased 35.4 percent from 1986 and 9.9 percent from 1981. The number of final rules reviewed in 1987 rose 1.9 percent from 1986 but dropped 31.2 percent from 1981. The number of major rules in 1987 was 2.8 percent less than the number in 1986, but rose 12.9 percent from 1981. The percentage-change comparisons with 1981 activity understate somewhat the decline in rulemaking actions, since the Executive Order review process operated for less than a full year in 1981.

Exhibit 5 shows, by agency, the number of rules reviewed during each of the last 7 years. Comparing 1987 with 1981, the greatest percentage declines in the total number of rules occurred at the Environmental Protection Agency (−72.1 percent), the Department of Energy (−62.3 percent), the Department of Agriculture (−36.2 percent), and the Department of Transportation (−29.1). The Department of Defense experienced the largest percentage increase since 1981 (325 percent), followed by Health and Human Services (168.4 percent), the Office of Personnel Management (155.3 percent), and the Department of Education (126 percent).

EXHIBIT 1.

EXECUTIVE ORDER 12291
TOTAL REVIEWS - BY AGENCY
1987

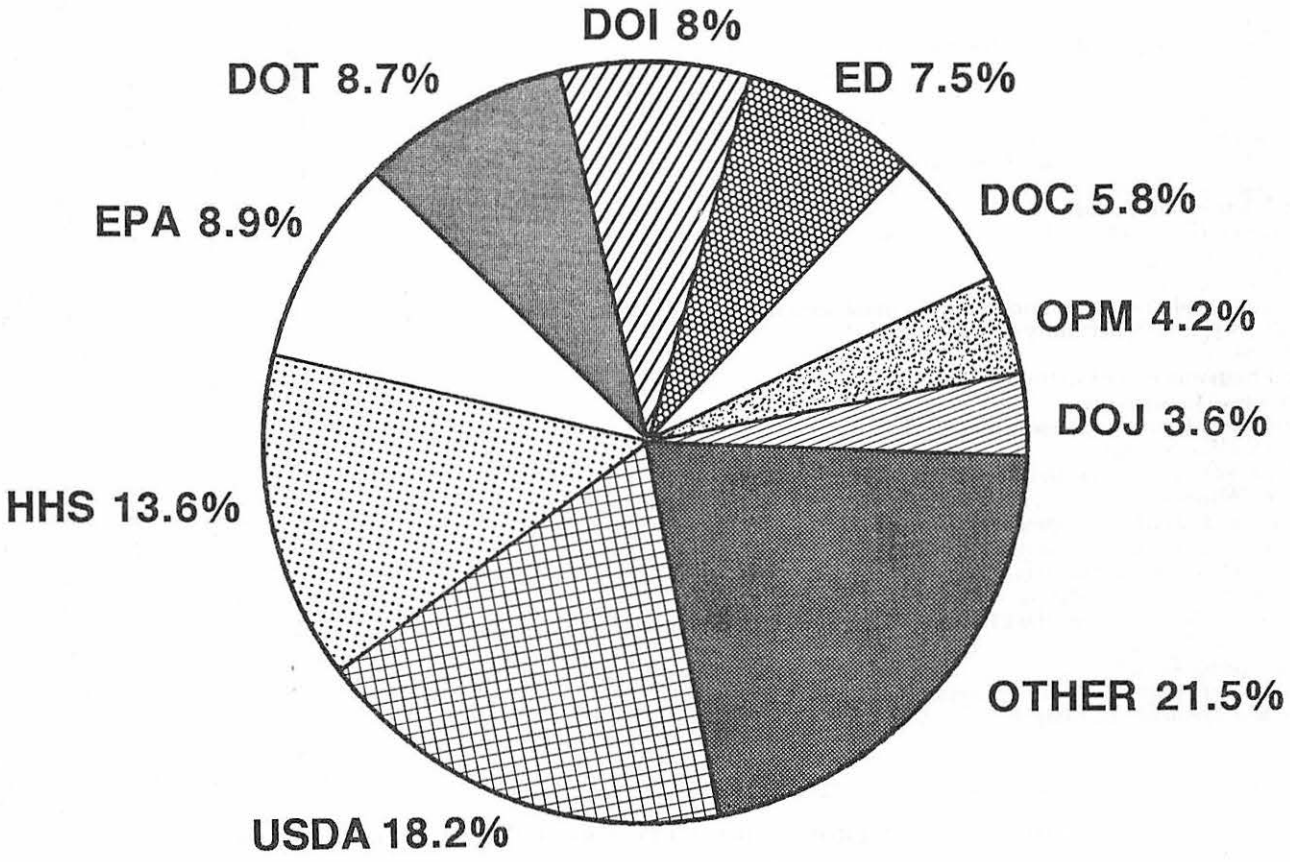

EXHIBIT 2. TYPES OF RULES REVIEWED DURING 1987 BY AGENCY

Agency	Total rules	Nonmajor		Major	
		NPRM	Final	NPRM	Final
Agriculture	420	188	213	11	8
Health and Human Services	314	162	149	2	1
Environmental Protection Agency	205	101	85	12	7
Transportation	202	85	113	2	2
Interior	186	93	90	1	2
Education	174	88	86	0	0
Commerce	134	54	80	0	0
Office of Personnel Management	97	28	69	0	0
Justice	84	37	45	1	1
Veterans Administration	67	37	30	0	0
Housing and Urban Development	64	24	35	3	2
Labor	64	24	34	3	3
General Services Administration	59	13	46	0	0
Treasury	29	13	16	0	0
Federal Emergency Management Agency	26	18	8	0	0
Energy	20	11	9	0	0
State	19	7	12	0	0
Defense	17	7	7	2	1
Small Business Administration	16	8	4	2	2
National Aeronautics and Space Administration	15	2	13	0	0
Other Temporary Commissions	12	3	9	0	0
Railroad Retirement Board	11	8	3	0	0
National Archives and Records Administration	9	4	5	0	0
U.S. Information Agency	8	6	2	0	0
ACTION	7	5	2	0	0
Architectural and Transportation Barriers Compliance Board	7	4	3	0	0
Equal Employment Opportunity Commission	7	2	3	1	1
Peace Corps	5	2	3	0	0
National Endowment for the Humanities	4	4	0	0	0
Panama Canal Commission	4	0	4	0	0
Pension Benefit Guaranty Corporation	4	2	2	0	0
Selective Service System	4	2	2	0	0
United States International Development Cooperation Agency	4	1	3	0	0
Institute of Museum Services	3	1	2	0	0
Pennsylvania Avenue Development Corporation	3	1	2	0	0
Federal Mediation and Conciliation Service	2	2	0	0	0
National Endowment for the Arts	2	2	0	0	0
African Development Foundation	1	1	0	0	0
Committee for Purchase from the Blind and Other Severely Handicapped	1	1	0	0	0
Inter-American Foundation	1	1	0	0	0
National Science Foundation	1	1	0	0	0
Navajo and Hopi Indian Relocation Commission	1	0	1	0	0
Office of Management and Budget	1	1	0	0	0
Total	2,314	1,054	1,190	40	30
Percentage of total	100.0	45.6	51.4	1.7	1.3

EXHIBIT 3. MAJOR PROPOSED AND FINAL RULES REVIEWED DURING 1987

1. Major Proposed Rules

UNITED STATES DEPARTMENT OF AGRICULTURE
- 1988 Wheat Program
- Common Program Provisions
- 1988 Feed Grain Program
- 1988 Upland Cotton Program
- 1987 Crop Soybean Preliminary Loan and Purchase Rate
- Safflower Crop Insurance Corporation
- General Crop Insurance Regulations
- Cranberry Crop Insurance
- Rural Housing Loan Policies
- Operating Loan Policies
- 1988 Rice Program

DEPARTMENT OF DEFENSE
- Champus Organization-Based Payment System
- Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

DEPARTMENT OF HEALTH AND HUMAN SERVICES
- Capital Payments under the Inpatient Hospital Prospective System
- Tests and Requirements for Certification of Permissibility of Respiratory Protective Devices

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
- Procedure for Calculating Maximum Mortgage Amounts
- Housing Voucher Program
- Housing Voucher Program

DEPARTMENT OF THE INTERIOR
- 1987-88 Migratory Game Bird Hunting

DEPARTMENT OF JUSTICE
- Control of Employment of Aliens

DEPARTMENT OF LABOR
- Davis-Bacon and Related Acts
- Hazardous Waste Operations and Emergency Response
- Electrical Safety-Related Work Practices

DEPARTMENT OF TRANSPORTATION
- Construction-Differential Subsidy Payment
- Light Truck Average Fuel Economy Standards for Model Years 1990-91

ENVIRONMENTAL PROTECTION AGENCY
- Emergency Planning and Community Right-To-Know Programs
- Requirements for Underground Storage Tanks
- RCRA Financial Responsibility for Underground Storage Tanks
- Notification Requirements for Industrial Non-hazardous Facilities
- Residential Wood Heaters
- Volatility for 1989 & Later Commercial Gasoline and Vehicle Evaporation Controls
- Refueling Emission for 1990 & Later Light-Duty Vehicles
- NAAQS — Fine Particulates
- Post-1987 Ozone and Carbon Monoxide Plan
- Protection of Stratospheric Ozone
- Toxic Chemical Release Inventory Form
- Asbestos-Containing Materials in Schools

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
- Pension Accruals Past Normal Retirement Age

SMALL BUSINESS ADMINISTRATION
- Small Business Size Standards
- Disaster Home Loan Program

2. Major Final Rules

UNITED STATES DEPARTMENT OF AGRICULTURE
- Grains and Similarly Handled Commodities
- Conservation Reserve Program
- 1987 Crop Soybean
- 1987 Wheat, Feed Grains, Rice and Cotton Programs
- 1987 Crop Sugar Beets and Sugarcane Price Support Loan Rates
- General Administrative Regulations — Suspension and Debarment
- General Administrative Regulations — Appeals Procedures
- Thrifty Food Plan and Deductions

DEPARTMENT OF DEFENSE
- Civilian Health and Medical Program

DEPARTMENT OF HEALTH AND HUMAN SERVICES
- Limits on Payments for Drugs

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
- Lead-Based Paint Hazard Elimination in FHA and Section 8 Programs
- Lead-Based Paint Hazard Elimination in Community Development Block Grants

DEPARTMENT OF THE INTERIOR
- Frameworks for Selecting Early Hunting Seasons
- Late Season Migratory Bird Hunting

DEPARTMENT OF JUSTICE
- Control of Employment of Aliens

DEPARTMENT OF LABOR
- Standard for Occupational Exposure to Benzene
- Occupational Exposure to Formaldehyde
- Grain Handling Facilities

DEPARTMENT OF TRANSPORTATION
- Intervals for Drydocking and Tailshaft Examinations
- Light Truck Fuel Economy Standards for Model Year 1989

ENVIRONMENTAL PROTECTION AGENCY
- Organic Chemicals, Plastics and Synthetic Fibers
- Coliform Maximum Contaminant Level
- California List
- Emergency and Hazardous Chemical Inventory Forms and Community Right-To-Know Reporting Requirements
- NAAQS — Particulate Matter
- NSPS for Industrial-Commercial-Institutional Steam Generating Units
- Asbestos Containing Materials in Schools

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
- Pension Accruals Past Normal Retirement Age

SMALL BUSINESS ADMINISTRATION
- Loans to State and Local Development Companies
- Disaster Home Loans, Debt Collection

EXHIBIT 4. COMPARISON OF RULES REVIEWED DURING 1981-87 BY TYPE

	Number							Percentage change						
Type of rule	1981	1982	1983	1984	1985	1986	1987	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1981-87
Nonmajor:														
Proposed	971	1,024	1,044	945	1,053	783	1,054	5.5	2.0	−9.5	11.4	−25.6	34.6	8.5
Final	1,735	1,528	1,377	1,101	1,100	1,150	1,190	−11.9	−9.9	−20.0	−0.1	4.5	3.5	−31.4
Total	2,706	2,552	2,421	2,046	2,153	1,933	2,244	−5.7	−5.1	−15.5	5.2	−10.2	16.1	−17.1
Major:														
Proposed	24	29	22	33	20	25	40	20.8	−24.1	50.0	−39.4	25.0	60.0	66.7
Final	38	51	39	25	38	47	30	34.2	−23.5	−35.9	52.0	23.7	−36.2	−21.1
Total	62	80	61	58	59	72	70	29.0	−23.8	−4.9	1.7	22.0	−2.8	12.9
All:														
E.O. Not Applicable	35	1	0	0	0	0	0	−97.1	−100.0	NA	NA	NA	NA	−100.0
Proposed	995	1,053	1,066	978	1,073	808	1,094	5.8	1.2	−8.3	9.7	−24.7	35.4	9.9
Final	1,773	1,579	1,416	1,126	1,138	1,197	1,220	−10.9	−10.3	−20.5	1.1	5.2	1.9	−31.2
Total	2,803	2,633	2,482	2,104	2,211	2,005	2,314	−6.1	−5.7	−15.2	5.1	−9.3	15.4	−17.4

EXHIBIT 5. TWENTY MOST ACTIVE RULE-PRODUCING AGENCIES, COMPARISON OF RULES REVIEWED 1981–1987

	Number							Percentage change						
Agency	1981	1982	1983	1984	1985	1986	1987	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1981-87
USDA	657	692	551	480	406	418	420	5.3	−20.4	−12.9	−15.4	3.0	0.5	−36.1
HHS	117	272	294	198	212	281	314	132.5	8.1	−32.7	7.1	32.5	11.7	168.4
EPA	734	340	268	302	302	197	205	−53.7	−21.2	12.7	0.0	−34.8	4.1	−72.1
DOT	285	225	225	217	253	196	202	−21.1	0.0	−3.6	16.6	−22.5	3.1	−29.1
DOI	147	248	240	132	161	144	186	68.7	−3.2	−45.0	22.0	−10.6	29.2	26.5
DOC	162	147	121	107	113	129	134	−9.3	−17.7	−11.6	5.6	14.2	3.9	−17.3
ED	77	52	50	104	109	99	174	−32.5	−3.8	108.0	4.8	−9.2	75.8	126.0
OPM	38	49	65	45	69	72	97	28.9	32.7	−30.8	53.3	4.3	34.7	155.3
HUD	74	130	111	108	90	68	64	75.7	−14.6	−2.7	−16.7	−24.4	−5.9	−13.5
VA	69	70	69	70	65	62	67	1.4	−1.4	1.4	−7.1	−4.6	8.1	−2.9
DOL	83	49	49	35	38	56	64	−41.0	0.0	−28.6	8.6	47.4	14.3	−22.9
DOJ	53	51	72	46	78	46	84	−3.8	41.2	−36.1	69.6	−41.0	82.6	58.5
GSA	56	62	85	62	85	41	59	10.7	37.1	−27.1	37.1	−51.8	43.9	5.4
SBA	10	16	20	31	19	30	16	60.0	25.0	55.0	−38.7	57.9	−46.7	60.0
FEMA	16	6	29	16	26	24	26	−62.5	383.3	−44.8	62.5	−7.7	8.3	62.5
TREAS	34	33	53	44	26	21	29	−2.9	60.6	−17.0	−40.9	−19.2	38.1	−14.7
DOE	53	49	34	25	19	16	20	−7.5	−30.6	−26.5	−24.0	−15.8	25.0	−62.3
NASA	10	11	13	11	25	15	15	10.0	18.2	−15.4	127.3	−40.0	0.0	50.0
NARA	NA	NA	NA	NA	9	13	9	NA	NA	NA	NA	44.4	−30.8	NA
DOD	4	9	13	7	17	9	17	125.0	44.4	−46.2	142.9	−47.1	88.9	325.0

B. Types of Actions Taken on Rules

Exhibits 6 through 9 summarize the actions taken on agency rules under Executive Order No. 12291 during 1987. Exhibit 10 compares OMB's action during 1987 with actions in previous years.

Exhibit 6 shows the number of rules in these categories that OMB reviewed during 1987 by each agency. Of the 2,314 rules reviewed during 1987, OMB found that 70.5 percent were consistent with the principles of the Executive Order as submitted, 23.7 percent were consistent with the Order after the agency adopted changes during the review period, 0.4 percent were inconsistent with the Order and returned to the agency for reconsideration, and another 2.5 percent were withdrawn by agencies. Emergency rules and rules subject to statutory or judicial deadlines constituted 2.5 percent of all 1987 rules, and 0.2 percent were sent improperly or were exempt.

Exhibit 7 shows the percentage of rules in each category for the 20 most active rulemaking agencies.

Exhibit 8 lists by name each of the 10 rules returned for reconsideration in 1987. Exhibit 9 lists by name each of the 59 rules withdrawn by agencies during OMB review in 1987. OMB may return regulations for reconsideration if it finds them to be inconsistent with the principles of the Executive Order. Agencies may withdraw rules during review because they have concluded that the rules are inconsistent with the Executive Order or for other reasons. An agency may, for example, wish to incorporate newly acquired information into a rule.

Exhibit 10 compares OMB actions on agency rules during the past seven years. The percentage of rules OMB found consistent with the Executive Order declined rather steadily, from 87.3 percent in 1981 to 68.3 percent in 1986, but increased slightly to 70.5 percent in 1987. At the same time, the percentage of rules OMB found consistent after change increased sharply, from 4.9 percent in 1981 to 23.7 percent in 1987. The percentage of rules that agencies withdrew through 1985 increased to 3.1 percent from 1.8 percent in 1981, then declined to 2.5 percent in 1987. The percentage of rules that OMB returned for agency reconsideration has fluctuated over the years but reached a low point of 0.4 percent in 1987 compared to 1.6 percent in 1981. Through 1985, the percentage of rules issued by agencies under emergency, statutory, or judicial deadlines did not appreciably change from the 1.4 percent recorded in 1981, but it increased significantly in 1986 to 4.3 percent before declining to 2.5 percent in 1987.

Exhibit 11 shows OMB's average regulatory review time by agency from 1981 to 1987 for all major and nonmajor rules. Generally, review time for major rules is longer than for nonmajor rules because of their greater complexity and importance. In 1981 OMB's average review time for all major rules was 13 days; in 1987, it was 32 days. OMB's average review time in 1981 for nonmajor rules was 9 days, as compared with an average of 25 days in 1987. The 1987 average review time for all rules was 25 days—slightly higher than 1986's average of 24 days.

C. Exemptions

Executive Order No. 12291 authorizes the Director of OMB to exempt classes of regulations from any or all of the requirements of the Order. The exemptions granted by OMB fall into four broad categories: (1) rules that are essentially nonregulatory; (2) rules that delegate regulatory authority to States; (3) rules that largely or entirely affect individual entities and that do not involve broader policy issues; and

(4) rules for which a delay of even a few days could impose substantial costs and that are unlikely to involve significant policy issues.

At the end of 1987, OMB had granted a total of 29 exemptions (some covering more than one of the categories above) to eight agencies. Exhibit 12 lists these exemptions. Most of the exemptions were established during the initial years of the operation of the Executive Order. In each case, OMB determined that the exempted regulations, as a class, were consistent with the goals and requirements of the Executive Order. OMB continues to review all major rules as defined by the Executive Order regardless of class exemptions. OMB may request that agencies submit specific rules within an exempt class and may revoke exemptions at any time.

IV. TRENDS IN REGULATORY ACTIVITY

Because there are no precise or agreed-upon measures of regulatory activity, we cannot measure the precise effect Executive Order No. 12291 has had on regulatory activity. It is useful, however, to compare the number of pages and the number of total rule documents (proposed-rule documents plus final-rule documents) published in the *Federal Register* during different time periods.

Exhibit 13 shows the number of pages published in the *Federal Register* from its inception in 1936 through 1987. There was little year-to-year change until the 1970s, when the size of the *Federal Register* increased dramatically. But in 1981, the year Executive Order No. 12291 went into effect, the growth in the *Federal Register* ended.

In fact the exhibit shows that since 1981, with but two exceptions, the size of the *Federal Register* has declined precipitously on an annual basis. In 1981 through 1984, the number of pages published in the *Federal Register* decreased—there were 41.4 percent fewer pages in the *Federal Register* in 1984 than in 1980. In 1985, the number of pages rose modestly by 4.87 percent over 1984 levels. But in 1986, the number of *Federal Register* pages declined 11.3 percent to its lowest level since 1974. In 1987 the number of published pages increased 4.7 percent above the 1986 level. Nevertheless, the overall trend of the past seven years is significantly downward sloping.

Exhibit 14 further depicts the effects of Executive Order No. 12291 on the size of the *Federal Register*. It does this by showing the number of pages published in the *Federal Register* each month since 1977. The dramatic break with the upward trend in the 1970s is clearly evident.

Exhibit 15 depicts the total number of proposed and final rule documents published since 1977. This chart parallels the exhibit for pages published. It also indicates that since Executive Order No. 12291 was issued, Federal regulatory activity as represented by documents issued has decreased.

Exhibits 16, 17, and 18 provide various measures of regulatory activity since 1980.

EXHIBIT 6. TYPES OF ACTIONS TAKEN ON AGENCY RULES DURING 1987

Agency	Total reviews	Consistent without change	Consistent with change	Withdrawn by agency	Returned for reconsideration	Returned sent improperly	Emergency	Statutory or judicial deadline
Agriculture	420	345	58	5	2	0	6	4
Health and Human Services	314	187	114	12	0	1	0	0
Environmental Protection Agency	205	123	60	9	0	1	0	12
Transportation	202	127	64	7	4	0	0	0
Interior	186	153	28	2	0	0	1	2
Education	174	106	64	4	0	0	0	0
Commerce	134	96	11	1	0	0	5	21
Office of Personnel Management	97	89	3	3	2	0	0	0
Justice	84	71	13	0	0	0	0	0
Veterans Administration	67	48	19	0	0	0	0	0
Labor	64	31	31	0	0	0	1	1
Housing and Urban Development	64	38	14	7	1	0	0	4
General Services Administration	59	41	15	3	0	0	0	0
Treasury	29	21	7	0	1	0	0	0
Federal Emergency Management Agency	26	14	10	2	0	0	0	0
Energy	20	12	8	0	0	0	0	0
State	19	15	2	1	0	1	0	0
Defense	17	13	4	0	0	0	0	0
Small Business Administration	16	9	6	0	0	0	1	0
National Aeronautics and Space Administration	15	11	4	0	0	0	0	0
Other Temporary Commissions	12	8	3	1	0	0	0	0
Railroad Retirement Board	11	7	1	1	0	2	0	0
National Archives and Records Administration	9	8	0	0	0	0	1	0
U.S. Information Agency	8	7	1	0	0	0	0	0
ACTION	7	6	1	0	0	0	0	0
Architectural and Transportation Barriers Compliance Board	7	5	1	1	0	0	0	0
Equal Employment Opportunity Commission	7	5	1	0	0	0	0	1
Peace Corps	5	5	0	0	0	0	0	0
National Endowment for the Humanities	4	3	1	0	0	0	0	0
Panama Canal Commission	4	3	1	0	0	0	0	0
Pension Benefit Guaranty Corporation	4	4	0	0	0	0	0	0
Selective Service System	4	3	1	0	0	0	0	0
U.S. International Development Corporation	4	3	1	0	0	0	0	0
Institute of Museum Services	3	3	0	0	0	0	0	0
Pennsylvania Avenue Development Corporation	3	3	0	0	0	0	0	0
Federal Mediation and Conciliation Service	2	2	0	0	0	0	0	0
National Education Administration	2	1	1	0	0	0	0	0
African Development Fund	1	1	0	0	0	0	0	0
Committee for Purchase from the Blind and Other Severely Handicapped	1	1	0	0	0	0	0	0
Inter-American Foundation	1	1	0	0	0	0	0	0
Navajo and Hopi Commission	1	0	1	0	0	0	0	0
National Science Foundation	1	1	0	0	0	0	0	0
Office of Management and Budget	1	1	0	0	0	0	0	0
Total	2,314	1,631	549	59	10	5	15	45
Percentage of total	100.0	70.5	23.7	2.5	0.4	0.2	0.6	1.9

EXHIBIT 7. TYPES OF ACTIONS TAKEN ON AGENCY RULES DURING 1987 BY PERCENTAGE

Agency	Total reviews	Percentage						
		Consistent without change	Consistent with change	Withdrawn by agency	Returned for reconsideration	Returned sent improperly	Emergency	Statutory or judicial deadline
Agriculture	420	82.1	13.8	1.2	0.5	0.0	1.4	1.0
Health and Human Services	314	59.6	36.3	3.8	0.0	0.3	0.0	0.0
Environmental Protection Agency	205	60.0	29.3	4.4	0.0	0.5	0.0	5.9
Transportation	202	62.9	31.7	3.5	2.0	0.0	0.0	0.0
Interior	186	82.3	15.1	1.1	0.0	0.0	0.5	1.1
Education	174	60.9	36.8	2.3	0.0	0.0	0.0	0.0
Commerce	134	71.6	8.2	0.7	0.0	0.0	3.7	15.7
Office of Personnel Management	97	91.8	3.1	3.1	2.1	0.0	0.0	0.0
Justice	84	84.5	15.5	0.0	0.0	0.0	0.0	0.0
Veterans Administration	67	71.6	28.4	0.0	0.0	0.0	0.0	0.0
Labor	64	48.4	48.4	0.0	0.0	0.0	1.6	1.6
Housing and Urban Development	64	59.4	21.9	10.9	1.6	0.0	0.0	6.3
General Services Administration	59	69.5	25.4	5.1	0.0	0.0	0.0	0.0
Treasury	29	72.4	24.1	0.0	3.4	0.0	0.0	0.0
Federal Emergency Management Agency	26	53.8	38.5	7.7	0.0	0.0	0.0	0.0
Energy	20	60.0	40.0	0.0	0.0	0.0	0.0	0.0
Defense	17	76.5	23.5	0.0	0.0	0.0	0.0	0.0
Small Business Administration	16	56.3	37.5	0.0	0.0	0.0	6.3	0.0
National Aeronautics and Space Administration	15	73.3	26.7	0.0	0.0	0.0	0.0	0.0
National Archives and Records Administration	9	88.9	0.0	0.0	0.0	0.0	11.1	0.0
All Other	112	78.6	14.3	3.6	0.0	2.7	0.0	0.9
Total	2,314	70.5	23.7	2.5	0.4	0.2	0.6	1.9

EXHIBIT 8. REGULATIONS RETURNED TO AGENCIES FOR RECONSIDERATION DURING 1987

Agency/Title of regulation	Type	Received	Reviewed
United States Department of Agriculture:			
Reimbursing Workfare's administrative costs	Final	12/17/85	06/25/87
Food Stamp Program: administrative review process	Final	04/06/87	11/19/87
Department of Housing and Urban Development:			
Housing Voucher Program	NPRM	04/16/87	06/15/87
Department of Transportation:			
Powered Ultralights, airman certification requirements	NPRM	11/27/85	02/18/87
Ultralight aircraft registration and markings	NPRM	03/18/86	02/18/87
Cargo preference	Final	02/12/87	03/23/87
Cargo preference	Final	05/29/87	06/05/87
Treasury Department:			
Country of origin marking	NPRM	07/17/87	11/27/87
Office of Personnel Management			
Service and enrollment areas for comprehensive medical plans	NPRM	01/09/87	07/29/87
Federal Employees Retirement System—disability retirement	NPRM	03/25/87	12/18/87

EXHIBIT 9. REGULATIONS WITHDRAWN BY AGENCIES DURING 1987

Agency/Title of regulation	Rule Type	Date Received	Date Withdrawn
United States Department of Agriculture:			
Animal Welfare—Definition of Terms	NPRM	12/15/86	02/06/87
Animal Welfare—Regulations	NPRM	12/12/86	02/06/87
Food Stamp Program—Demonstration and Evaluation Project Agenda	NPRM	11/17/86	02/20/87
Food Stamp Program—Income and Resource Eligibility and Verification	NPRM	02/11/87	04/20/87
Service Community Program Loans Sold to the Private Sector	NPRM	08/20/87	08/21/87
Department of Commerce:			
Electronic Data Dissemination Policies and Guidelines	NPRM	05/08/87	07/10/87
Department of Education:			
Territorial Teacher Training Assistance Program	NPRM	03/24/87	05/07/87
Transition Program for Refugee Children	NPRM	02/26/87	05/29/87

EXHIBIT 9. REGULATIONS WITHDRAWN BY AGENCIES DURING 1987—Continued

Agency/Title of regulation	Rule Type	Date Received	Date Withdrawn
Formula Grants—Local Educational Agencies and Tribal Schools	NPRM	03/20/87	07/10/87
Pell Grant Program	Final	06/29/87	07/23/87
Department of Health and Human Services:			
Area Health Education Center Progam	Final	11/25/86	02/10/87
Scholarship Eligibility Under Indian Health Scholarship Program	NPRM	01/30/87	03/09/87
Effect of Pension from Noncovered Employment	Final	02/03/87	03/24/87
Covered Surgical Procedures for Ambulatory Surgical Centers	NPRM	03/20/87	04/21/87
Presumptive Disability, Categories of Impairments—AIDS	Final	06/15/87	07/21/87
Presumptive Disability, Categories of Impairments—Renal Disease	NPRM	06/15/87	08/12/87
Health Education Assistance Program—Stay of Litigation Requirement	NPRM	08/04/87	08/14/87
Recognition of College of American Pathologists Accreditation Program	NPRM	04/13/87	08/24/87
Supplementary Payments to Individuals in Medicaid Facilities	Final	06/19/87	09/21/87
Supplemental Security Income for the Aged, Blind, and Disabled	NPRM	06/15/87	09/27/87
Alertness Aid Drug Products for Over-the-Counter Human Use	Final	07/17/87	10/19/87
Utilization and Quality Control Peer Review Program	NPRM	10/26/87	11/25/87
Department of Housing and Urban Development:			
Procedure for Calculating Maximum Mortgage Amounts	NPRM	01/30/87	05/04/87
Manufactured Home Construction—Vapor Barrier Penetration	NPRM	02/10/87	05/28/87
Condominium Ownership Mortgage Insurance	Final	06/24/87	07/02/87
Manufactured Home Construction and Safety Standards	Final	08/05/87	08/07/87
Manufactured Home Design Inspection System	NPRM	06/11/87	08/19/87
Increase in the Single-Person Occupancy Limitation	NPRM	08/26/87	11/25/87
HUD-Determined Maintenance Wage Rates	NPRM	10/22/87	11/25/87
Department of the Interior:			
Financial Assistance and Social Services Program	NPRM	05/08/87	09/14/87
Special Grants for Economic Development	NPRM	01/07/87	11/05/87
State Department			
Ineligible Classes of Aliens—Immigration and Nationality Act	Final	03/02/87	04/15/87
Department of Transportation:			
Daytime Running Lamps	NPRM	01/07/87	01/14/87
Administration of Contracts	NPRM	01/30/87	04/08/87
Automatic Train Control, Northeast Corridor Carriers	NPRM	05/07/87	05/18/87
Reporting Unsafe Conditions on Gas and Hazardous Liquid Pipelines	NPRM	07/10/87	07/14/87
Report of Financial Data for Commuter Carriers	NPRM	08/05/87	08/10/87
Counting UMTA Reduced-Fare Program Costs Toward 504 Cost Cap	NPRM	09/08/87	09/18/87
Truck Size and Weight, Reasonable Access	NPRM	11/27/87	12/01/87
Environmental Protection Agency:			
Colorado Carbon Monoxide Plan for the Denver Area	NPRM	05/27/87	06/16/87
Disapproval of Atlanta O_3-State Implementation Plan	NPRM	05/28/87	06/16/87
Notification Requirements—Industrial Nonhazardous Disposal Facility	NPRM	06/30/87	08/12/87
Stack Height Emissions Balancing	Final	06/16/87	06/26/87
Fuel Economy Test	Final	09/04/87	09/09/87
Reportable Quantity Adjustments—Saccharin	Final	10/22/87	12/07/87
NSPS—Sewage Treatment Plants	Final	06/30/87	09/17/87
Small-Volume Manufacturer Certification	NPRM	09/18/87	12/18/87
America Mining Congress v. EPA Interpretation	Final	10/28/87	12/08/87
Architectural and Transportation Barriers Compliance Board:			
Information Availability—Procedures	NPRM	03/24/87	04/02/87
Federal Emergency Management Agency:			
Guidance for Implementing Disaster Relief Act Amendments of 1974	NPRM	02/02/87	02/10/87
Administration of Grants, Audits of State and Local Governments	Final	11/25/87	12/03/87
General Services Administration:			
GSA Board of Contract Appeals ADP Protests	Final	07/02/86	03/05/87
Electronic Recordkeeping	NPRM	12/24/86	10/15/87
Centralized Services in Federal Buildings	Final	08/29/86	11/18/87
Office of Personnel Management:			
Special Provisions for Certain Annuitants Employed by INS	Final	06/12/87	12/03/87
Severance Pay	NPRM	02/26/87	12/10/87
Severance Pay	NPRM	11/06/87	12/18/87
Other Temporary Commissions:			
Nondiscrimination on the Basis of Handicap	NPRM	01/20/87	01/29/87
Railroad Retirement Board:			
Determining Disability	NPRM	04/06/87	10/07/87

EXHIBIT 10. TYPES OF ACTIONS TAKEN ON AGENCY RULES—PERCENTAGE COMPARISON 1981–1987

Action taken	Percentage in							Percentage change						
	1981	1982	1983	1984	1985	1986	1987	81-82	82-83	83-84	84-85	85-86	86-87	81-87
Consistent without change....	87.3	84.1	82.3	78.0	70.7	68.3	70.5	−3.2	−1.8	−4.3	−7.3	−2.4	2.2	−16.8
Consistent with change.....	4.9	10.3	12.7	15.1	23.1	22.9	23.7	5.4	2.4	2.4	8.0	−0.2	0.8	18.8
Withdrawn by agency.....	1.8	1.2	1.6	2.4	3.1	2.8	2.5	−0.6	0.4	0.8	0.7	−0.3	−0.3	0.7
Returned for reconsideration..	1.6	2.1	1.3	2.7	1.5	1.4	0.4	0.5	−0.8	1.4	−1.2	−0.1	−1.0	−1.2
Sent improperly or exempt....	3.1	0.9	0.0	0.0	0.3	0.2	0.2	−2.2	−0.9	0.0	0.3	−0.1	0.0	−2.9
Emergency, statutory, or judicial deadline.....	1.4	1.4	2.0	1.7	1.2	4.3	2.5	0.0	0.6	−0.3	−0.5	3.1	−1.8	1.1
Total (column entries are rounded figures)	100.1	100.0	99.9	99.9	99.9	99.9	99.8							

EXHIBIT 11. AVERAGE REVIEW TIME OF RULES UNDER EXECUTIVE ORDER NO. 12291
(in days)

	1981			1982			1983			1984		
	Major	Nonmajor	All	Major	Nonmajor	All	Major	Nonmajor	All	Major	Nonmajor	All
USDA	22	8	8	17	10	10	15	13	13	11	19	19
DOC	8	8	8	22	9	10	5	11	11	316	14	17
DOD	NA	9	9	NA	6	6	NA	16	16	NA	30	30
ED	NA	8	8	32	12	13	NA	11	11	39	18	19
DOE	7	7	7	26	6	7	45	7	9	77	9	12
HHS	8	7	7	21	10	11	35	18	19	3	33	33
HUD	NA	14	14	NA	11	11	12	15	15	10	18	17
DOI	6	8	8	13	10	10	12	17	17	7	17	17
DOJ	NA	6	6	NA	7	7	NA	14	14	NA	10	10
DOL	26	6	9	37	10	12	121	18	29	NA	43	43
STATE	NA	9	9	NA	7	7	28	10	16	NA	5	5
DOT	8	8	8	37	12	12	24	15	15	42	20	21
TREAS	1	8	8	60	13	14	NA	12	12	17	18	18
EPA	12	9	9	88	17	19	14	22	22	58	30	31
Other agencies	5	10	10	40	13	14	35	14	14	26	20	20
All government	13	9	9	28	11	12	28	15	16	31	22	22

	1985			1986			1987			1981-87		
	Major	Nonmajor	All	Major	Nonmajor	All	Major	Nonmajor	All	Major	Nonmajor	All
USDA	15	19	19	13	18	18	18	19	19	16	14	14
DOC	NA	12	12	127	15	15	NA	19	19	41	12	13
DOD	NA	30	30	30	28	28	4	12	11	11	20	19
ED	NA	16	16	14	13	13	NA	15	15	34	14	14
DOE	30	7	8	34	15	17	NA	24	24	31	9	10
HHS	74	46	47	19	37	36	24	38	38	33	28	28
HUD	NA	27	27	44	32	33	33	21	22	24	19	19
DOI	5	19	19	7	11	11	12	20	19	9	15	14
DOJ	NA	9	9	NA	8	8	2	6	6	2	9	9
DOL	173	55	61	76	47	49	91	52	54	71	34	37
STATE	NA	16	16	NA	5	5	NA	12	12	28	10	10
DOT	80	34	36	32	19	19	21	32	31	39	20	21
TREAS	16	13	13	NA	7	7	NA	16	16	24	13	13
EPA	78	33	35	41	41	41	49	35	37	58	22	23
Other agencies	105	23	25	74	24	25	37	26	26	45	19	19
All government	64	26	27	29	24	24	32	25	25	32	18	19

EXHIBIT 12. AGENCY RULES EXEMPTED FROM REVIEW PROCEDURES

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service—Special Nutrition program notices that revise reimbursement rates and eligibility criteria for the School Lunch, Child Care Food, and other nutrition programs.

Food and Nutrition Service—Food Stamp program notices that set eligibility criteria and deduction policies.

Agricultural Marketing Service—Regulations that establish voluntary standards for grading the quality of food.

Animal and Plant Health Inspection Service—Rules and notices concerning quarantine actions and related measures to prevent the spread of animal and plant pests and diseases.

Animal and Plant Health Inspection Service—Rules affirming actions taken on an emergency basis if no adverse comments were received.

Rural Electrification Administration—Rules concerning standards and specifications for construction and materials.

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration—Certain time-sensitive preseason and in-season Fishery Management Plan regulatory actions that set restrictions on fishing seasons, catch size, and fishing gear.

DEPARTMENT OF ENERGY

Power Marketing Administrations—Regulations issued by various power administrations relating to the sale of electrical power that they produce or market.

DEPARTMENT OF THE INTERIOR

Office of Surface Mining—Actions to approve, or conditionally approve, State regulatory mining actions or amendments to such actions.

Office of Surface Mining—Approval of State mining reclamation plans or amendments.

Office of Surface Mining—Cooperative agreements between OSM and States.

United States Fish and Wildlife Service—Certain parts of the annual migratory bird hunting regulations.

DEPARTMENT OF TRANSPORTATION

All Offices of DOT—Amendments that postpone the compliance dates of regulations already in effect.

Coast Guard—Regatta regulations, safety zone regulations, and security zone regulations.

Coast Guard—Anchorage, drawbridge operations, and inland waterways navigation regulations.

Coast Guard—Regulations specifying amount of separation required between cargoes containing incompatible chemicals.

Federal Aviation Administration—Standard instrument approach procedure regulations, en route altitude regulations, routine air space actions, and airworthiness directives.

National Highway Traffic Safety Administration—Federal Motor Vehicle Safety Standard 109 table of tire sizes.

DEPARTMENT OF THE TREASURY

Internal Revenue Service, Bureau of Alcohol, Tobacco and Firearms, and Customs Service—Revenue rulings and procedures, Customs decisions, legal determinations, and other similar ruling documents. Major legislative regulations are covered fully.

ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticides and Toxic Substances—Actions regarding pesticide tolerances, temporary tolerances, tolerance exemptions and food additives regulations, except those that make an existing tolerance more stringent.

Office of Pesticides and Toxic Substances—Unconditional approvals of TSCA Section 5 test marketing exemptions, and of experimental use permits under FIFRA.

Office of Pesticides and Toxic Substances—Decision documents defining and establishing registration standards; decision documents and termination decisions for the RPAR process; and data call-in requests made under Section 3(c)(2)(B) of FIFRA.

Office of Air, Noise, and Radiation—Rules that unconditionally approve revisions to State Implementation Plans.

Office of Air, Noise, and Radiation—Unconditional approvals of equivalent methods for ambient air quality monitoring, and of NSPS, NESHAPS, and PSD delegations to States; approvals of carbon monoxide and nitrogen oxide waivers; area designations of air quality planning purposes; and deletions from the NSPS source categories list.

Office of Water—Unconditional approvals of State Water Standards.

Office of Water—Unconditional approval of State underground injection control programs; delegations of NPDES authority to States; deletions from the 307(a) list of toxic pollutants; and suspensions of Toxic Testing Requirements under NPDES.

Office of Solid Waste and Emergency Response—Unconditional approvals of State authorization under RCRA, of State solid waste management plans, and of hazardous waste delisting petitions under RCRA.

PENSION BENEFIT GUARANTY CORPORATION

Interest Rates—Changes in interest rates on late premium payments and delinquent employer liability payments under Sections 6601 and 6621 of the Internal Revenue Code as amended by the Tax Equity and Fiscal Responsibility Act of 1982.

GOVERNMENTWIDE

Office of Federal Procurement Policy—All regulations, except those concerning acquisition of automatic data processing and telecommunications equipment; those implementing and supplementing Federal Acquisition Regulation Subparts 15.6 (Source Selection) and 32.5 (Progress Payments Based on Costs); and those implementing and supplementing the Competition in Contracting Act of 1984 (Public Law 98-3691), the Defense Procurement Reform Act of 1984 (Title XII, Public Law 98-525), and the Small Business and Federal Procurement Competition Enforcement Act of 1984 (Public Law 98-577).

EXHIBIT 13.

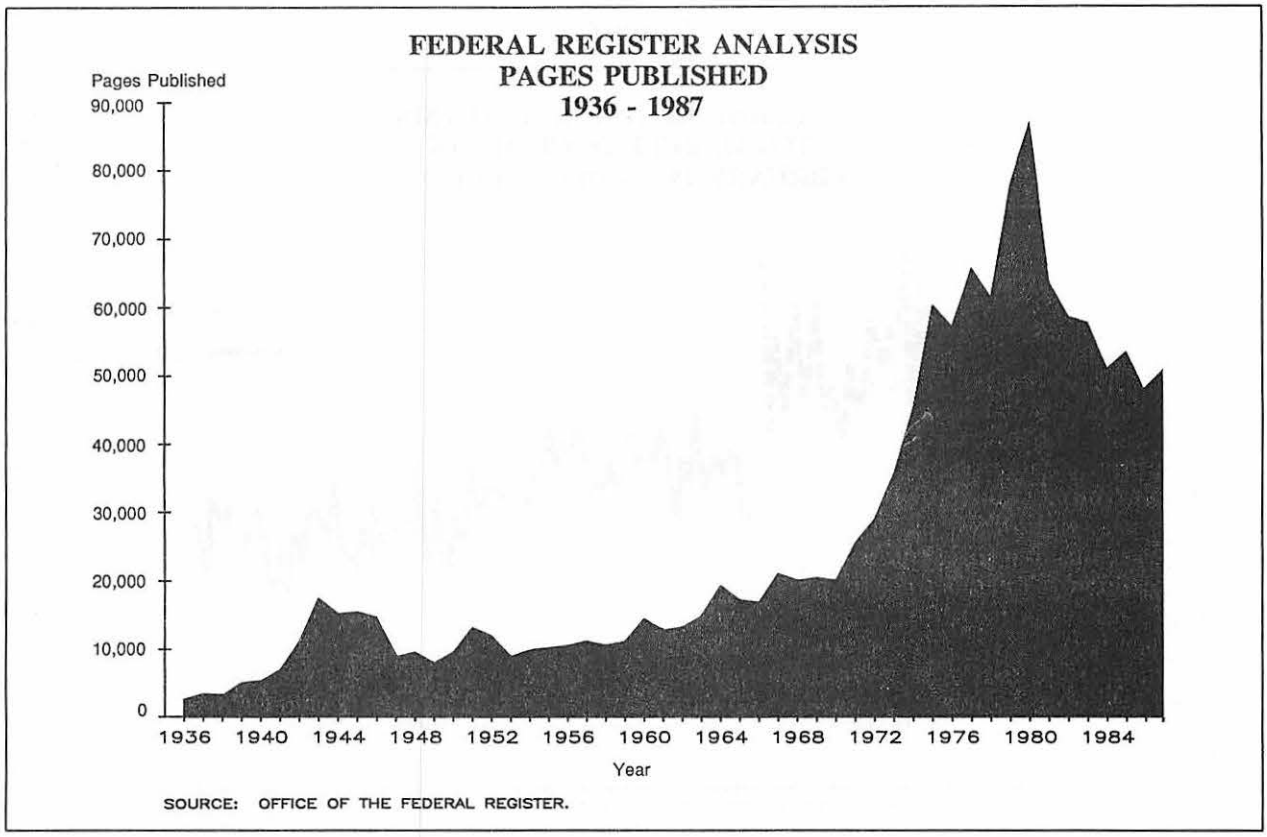

EXHIBIT 14.

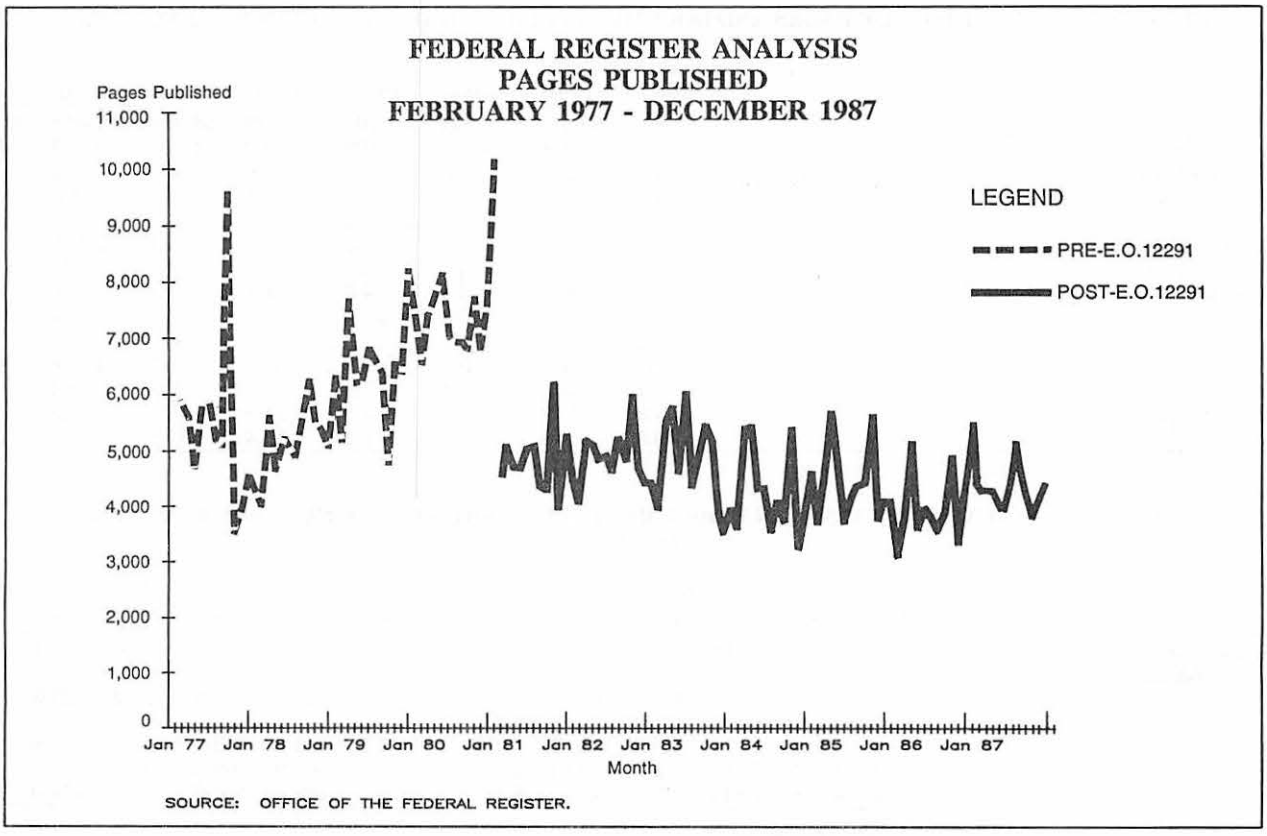

EXHIBIT 15.

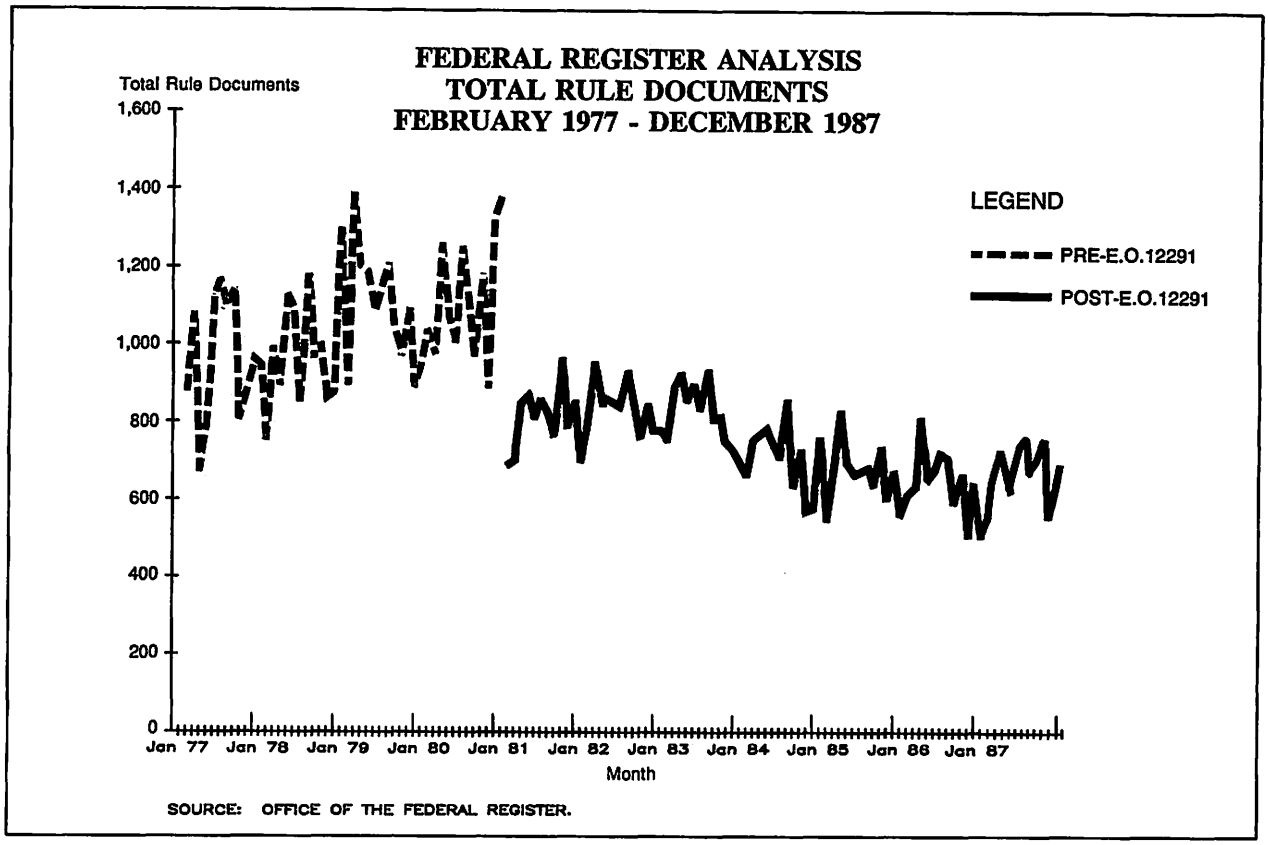

EXHIBIT 16. COMPARISON OF PAGES AND DOCUMENTS PUBLISHED IN THE *FEDERAL REGISTER*
1980–1987

	1980	1981	1982	1983	1984	1985	1986	1987
Total pages published	87,012	63,554	58,494	57,704	50,998	53,480	47,418	49,654
Average pages per month	7,251	5,296	4,875	4,809	4,250	4,457	3,952	4,138
Percentage change year to year	NA	−27.0	− 8.0	− 1.4	−11.6	4.9	−11.3	4.7
Percentage change from 1980	NA	−27.0	−32.8	−33.7	−41.4	−38.5	−45.5	−42.9
Proposed rule documents	5,347	3,862	3,729	3,906	3,350	3,381	3,185	3,423
Average documents per month	446	322	311	326	279	282	265	285
Percentage change year to year	NA	−27.8	− 3.4	4.7	−14.2	0.9	− 5.8	7.5
Percentage change from 1980	NA	−27.8	−30.3	−26.9	−37.3	−36.8	−40.4	−36.0
Final rule documents	7,745	6,401	6,288	6,049	5,155	4,843	4,589	4,581
Average documents per month	645	533	524	504	430	404	382	382
Percentage change year to year	NA	−17.4	− 1.8	− 3.8	−14.8	− 6.1	− 5.2	− 0.2
Percentage change from 1980	NA	−17.4	−18.8	−21.9	−33.4	−37.5	−40.7	−40.9

EXHIBIT 17. ANALYSIS OF FINAL RULE DOCUMENTS PUBLISHED IN THE *FEDERAL REGISTER*
1982–1987

	Final Rules						Percentage of Total					
	1987	1986	1985	1984	1983	1982	1987	1986	1985	1984	1983	1982
New requirements	451	366	358	260	248	294	9.8	7.6	7.4	5.0	4.1	4.7
Revision to existing requirements	1,241	1,267	1,255	1,350	1,430	1,530	27.1	24.2	25.9	26.2	23.6	24.3
Elimination of existing requirements	85	142	177	162	217	299	1.9	3.3	3.7	3.1	3.6	4.8
All other	2,804	2,814	3,053	3,383	4,154	4,165	61.2	64.9	63.0	65.6	68.7	66.2
Total	4,581	4,589	4,843	5,155	6,049	6,288	100.0	100.0	100.0	100.0	100.0	100.0

EXHIBIT 18. FINAL RULE DOCUMENTS BY AGENCY PUBLISHED IN THE *FEDERAL REGISTER* 1982–1987

Agency	Number of documents						Percentage of documents					
	1987	1986	1985	1984	1983	1982	1987	1986	1985	1984	1983	1982
Agriculture	556	554	611	684	638	674	11.3	11.1	11.8	12.9	10.5	10.6
Commerce	285	292	254	202	213	205	5.8	5.9	4.9	3.8	3.5	3.2
Defense	172	198	113	102	109	111	3.5	4.0	2.2	1.9	1.8	1.8
Education	68	51	40	35	25	36	1.4	1.0	0.8	0.7	0.4	0.6
Energy	15	21	14	27	37	52	0.3	0.4	0.3	0.5	0.6	0.8
Health and Human Services	380	405	450	422	573	561	7.7	8.1	8.7	8.0	9.5	8.9
Housing and Urban Development	89	95	96	141	128	124	1.8	1.9	1.9	2.7	2.1	2.0
Interior	246	240	258	320	461	477	5.0	4.8	5.0	6.0	7.6	7.5
Justice	122	116	108	113	159	102	2.5	2.3	2.1	2.1	2.6	1.6
Labor	56	55	68	56	63	63	1.1	1.1	1.3	1.1	1.0	1.0
State	18	12	7	7	8	15	0.4	0.2	0.1	0.1	0.1	0.2
Transportation	859	923	903	748	865	908	17.4	18.5	17.4	14.1	14.3	14.3
Treasury	184	236	219	247	244	180	3.7	4.7	4.2	4.7	4.0	2.8
Environmental Protection Agency	438	487	518	624	605	805	8.9	9.8	10.0	11.8	10.0	12.7
Equal Employment Opportunity Commission	18	8	13	14	16	7	0.4	0.2	0.3	0.3	0.3	0.1
Federal Emergency Management Agency	66	71	84	91	261	398	1.3	1.4	1.6	1.7	4.3	6.3
Government Services Administration	83	74	107	74	95	80	1.7	1.5	2.1	1.4	1.6	1.3
National Aeronautics and Space Administration	33	36	28	15	20	18	0.7	0.7	0.5	0.3	0.3	0.3
Office of Management and Budget	2	0	0	1	2	1	0.0	0.0	0.0	0.0	0.0	0.0
Office of Personnel Management	74	44	39	38	43	25	1.5	0.9	0.8	0.7	0.7	0.4
Small Business Administration	14	34	26	39	26	26	0.3	0.7	0.5	0.7	0.4	0.4
Veterans Administration	49	51	49	54	53	54	1.0	1.0	0.9	1.0	0.9	0.9
Other	257	275	241	261	335	337	5.2	5.5	4.7	4.9	5.5	5.3
Commodity Futures Trading Commission	25	19	32	38	51	19	0.5	0.4	0.6	0.7	0.8	0.3
Consumer Product Safety Commission	8	9	17	30	22	25	0.2	0.2	0.3	0.6	0.4	0.4
Federal Communications Commission	444	306	400	405	359	393	9.0	6.1	7.7	7.7	5.9	6.2
Federal Deposit Insurance Corporation	16	16	14	20	24	17	0.3	0.3	0.3	0.4	0.4	0.3
Federal Energy Regulatory Commission	95	82	127	139	156	120	1.9	1.6	2.5	2.6	2.6	1.9
Federal Home Loan Bank Board	30	29	39	32	41	53	0.6	0.6	0.8	0.6	0.7	0.8
Federal Maritime Commission	17	6	9	43	19	26	0.3	0.1	0.2	0.8	0.3	0.4
Federal Reserve System	32	28	40	37	66	75	0.6	0.6	0.8	0.7	1.1	1.2
Federal Trade Commission	49	77	84	82	116	80	1.0	1.5	1.6	1.6	1.9	1.3
Interstate Commerce Commission	48	51	59	53	103	127	1.0	1.0	1.1	1.0	1.7	2.0
Nuclear Regulatory Commission	47	36	49	42	55	51	1.0	0.7	0.9	0.8	0.9	0.8
Securities and Exchange Commission	40	54	66	54	65	84	0.8	1.1	1.3	1.0	1.1	1.3
Total[a]	4,935	4,991	5,182	5,290	6,056	6,329	100.0	100.0	100.0	100.0	100.0	100.0

[a]Totals may include final rules issued jointly by two or more agencies.

APPENDIX V

Regulatory Impact Analysis Guidance[1]

A Regulatory Impact Analysis (RIA) should demonstrate that a proposed regulatory action satisfies the requirements of Section 2 of Executive Order No. 12291. To do so, it should show that:

- There is adequate information concerning the need for and consequences of the proposed action;
- The potential benefits to society outweigh the potential costs; and
- Of all the alternative approaches to the given regulatory objective, the proposed action will maximize net benefits to society.

The fundamental test of a satisfactory RIA is whether it enables independent reviewers to make an informed judgment that the objectives of Executive Order No. 12291 are satisfied. An RIA that includes all the elements described below is likely to fulfill this requirement. Although variations consistent with the spirit and intent of the Executive Order may be warranted for some rules, most RIAs should include these elements.

The guidance in this document is not in the form of a mechanistic blueprint, for a good RIA cannot be written according to a formula. Competent professional judgment is indispensable for the preparation of a high-quality analysis. Different regulations may call for very different emphases in analysis. For one proposed regulation, the crucial issue may be the question of whether a market failure exists, and much of the analysis may need to be devoted to that key question. In another case the existence of a market failure may be obvious from the outset, but extensive analysis might be necessary to estimate the magnitude of benefits to be expected from proposed regulatory alternatives. The amount of analysis (whether scientific, statistical, or economic) that a particular issue requires depends on how crucial that issue is to determine the best alternative and on the complexity of the issue.

Regulatory analysis inevitably involves uncertainties and requires informed professional judgments. Whenever an agency has questions about such issues as the appropriate analytical techniques to use or the alternatives that should be considered, it should consult with the Office of Management and Budget as early in the analysis stage as possible.

This document is written primarily in terms of proposed regulatory changes. However, it is equally applicable to the review of existing regulations. In the latter case, the regulation under review should be compared to a baseline case of no regulation and to reasonable alternatives.

Elements of a Regulatory Impact Analysis

Preliminary and final Regulatory Impact Analyses of major rules should contain five elements. They are: (1) a statement of the potential need for the proposal, (2) an examination of alternative approaches, (3) an analysis of benefits and costs, (4) the rationale for choosing the proposed regulatory action, and (5) a statement of statutory authority. These elements are explained in sections I-V below.

I. STATEMENT OF POTENTIAL NEED FOR THE PROPOSAL

In order to establish the potential need for the proposal, the analysis should demonstrate that (a) market failure exists that is (b) not adequately resolved by measures other than Federal regulation.

A. Market Failure

The analysis should determine whether there exists a market failure that is likely to be significant. Once such market failure has been identified, the analysis should show how adequately the regulatory alternatives to be considered address the specified market failure. The three major types of market failure are externality, natural monopoly, and inadequate information.

1. *Externality.* An externality occurs when one party's actions impose uncompensated benefits or costs on another outside the marketplace. Environmental problems are a classic case of externality. Another example is the case of common property resources that may become congested or overused, such as fisheries or the broadcast spectrum. A third example is a "public good," such as defense or scientific research, whose distinguishing characteristic is that it is inefficient, or impossi-

[1]This appendix was mainly written by Michael Mazur as one of his last projects before his untimely death last year. Those who knew Mike will appreciate his hard work and careful analysis that made this guidance possible.

ble, to exclude individuals from its benefits.

2. *Natural monopoly.* Natural monopoly exists where a market can be served at lowest cost only if production is limited to a single producer. Local telephone, gas, and electricity services are examples.
3. *Inadequate information.* The optimum, or ideal, level of information is not necessarily the maximum possible amount, because information, like other goods, should not be produced when the costs of doing so exceed the benefits. The free market does not necessarily supply an optimal level of information, because information once generated can be disseminated at little or no marginal cost and because it is commonly infeasible to exclude nonpayers from reaping benefits from the provision of information by others. Where market failure due to inadequate information is the rationale for government intervention, a regulatory acton to improve the availability of information will ordinarily be the preferred alternative.

The current state of knowledge about the economics of information is not highly developed. Therefore, regulatory intervention to address an information problem should only be undertaken where there is substantial reason to believe that private incentives to provide information are seriously inadequate and that the specific regulatory intervention proposed will provide net benefts for society.

In many circumstances, the availability of information, while perhaps not optimal, is reasonably adequate, so that attempts to regulate information are as likely to make things worse as to make them better. Information about a particular characteristic of a product, for example, would be reasonably adequate if buyers could determine the existence of the characteristic by inspection of the product before purchase or (in the case of a frequently purchased product) by use of the product. Even if the characteristic could not be determined by buyers, government intervention would not be warranted where sellers have incentives to reveal the existence of the characteristic to buyers. Sellers will have substantial incentives to supply information about any characteristic that is important to buyers and valued positively by them, particularly if the level of the characteristic varies between the products of one seller and another. In these circumstances sellers whose products rank highly in the valued characteristic can increase their sales by informing buyers of the superiority of their products. If the level of the characteristic does not vary between the products of one seller and another, individual sellers have less incentive to inform buyers about the characteristic. Even so, the incentives of individual sellers or of a trade association to supply information may be substantial.

Sellers are least likely to supply adequate information about a particular characteristic of their product where the characteristic is negatively valued by consumers and the level of the characterstic does not vary between the products of one seller and those of another (e.g., cholesterol in eggs). Even in such circumstances, substantial information about the characteristic may be available to buyers. For example, sellers of rival products may supply the information (e.g., while sellers of butter may have no incentive to tell buyers about cholesterol in butter and its possible consequences, sellers of margarine do have such an incentive). Where the negative characteristic involves a health or safety hazard, the threat of future product liability lawsuits may give sellers adequate incentives to reveal information about the potential hazard. News media, consumer groups, public health agencies, and similar services may supply information not supplied by sellers. In summary, while it is possible to identify situations in which market failure due to inadequate information is more likely to warrant regulatory intervention, each situation must be examined on a case-by-case basis.

There should be a presumption against the need for certain types of regulatory actions, except in special circumstances. A particularly demanding burden of proof is required to demonstrate the potential need for any of the following types of regulations:

- Price controls in competitive markets
- Controls on producton or sales in competitive markets
- Mandatory uniform quality standards for goods or services, unless they have hidden safety or other defects and the problem cannot be adequately dealt with by voluntary standards or information disclosing the hazard to potential buyers or users
- Controls on entry into employment or

production, except
(a) where indispensable to protect health and safety (e.g., FAA tests for commercal pilots), or
(b) to manage the use of common public resources (e.g., fisheries, airwaves, Federal lands, and offshore areas).

B. Other Alternatives

Even where a market failure exists, there may be no need for Federal regulatory intervention if other means of dealing with the market failure resolve the problem adequately or better than the proposed Federal regulation would. Among the alternative means that may be applicable are the judicial system (particularly liability cases to deal with health and safety), antitrust enforcement, and workers' compensation systems.

An important alternative that may often be relevant is regulation at the State or local level. In determining whether there exists a potential need for a proposed Federal regulation, the analysis should examine whether regulation at the Federal level is more appropriate than regulation at the State or local level. This analysis may support regulation at the Federal level where rights of national citizenship (such as legal equality among the races) or considerations of interstate commerce are involved. If interstate commerce is involved, the analysis should attempt to determine whether the burdens on interstate commerce arising from different State and local regulations are so great that they outweigh the advantages of diversity and local political choice. In some cases the nature of the market failure may itself suggest the most appropriate governmental level of regulation. For example, pollution that spills across state lines (such as acid rain whose precursors are transported widely in the atmosphere) is probably best controlled by Federal regulation, while localized pollution (such as garbage truck noise) is probably more efficiently handled by local government regulation.

In general, because demands among localities for different governmental services differ and because competition among governmental units for taxpayers and citizens may encourage efficient regulation, the smallest unit of government capable of correcting the market failure should be chosen. This must, however, be balanced against the possibility of higher costs because national firms would be required to comply with more than one set of regulations and because administering similar regulations in more than one governmental unit involves some costs of duplication. Thus, some analysis may be necessary to determine which level of government can most efficiently regulate a specific market failure.

If the analysis does suggest a potential need for a Federal action, it should also consider alternatives of nonregulatory Federal measures. For example, as an alternative to requiring an action or the use of a particular product, it may be more efficient to subsidize it. Similarly, a fee or charge may be a preferable alternative to banning or restricting a product or action. An example would be an effluent discarge fee, which has been recommended as an efficient way to limit pollution because it causes pollution sources with different marginal costs of abatement to control effluents in an efficient manner. In addition, legislative measures that make use of economic incentives, such as changes in insurance provisions or changes in property rights, should be considered.

II. AN EXAMINATION OF ALTERNATIVE APPROACHES

The RIA should show that the agency has considered the most important alternative approaches to the problem and must provide the agency's reasoning for selecting the proposed regulatory change over such alternatives. Ordinarily, it will be possible to eliminate some alternatives by a preliminary analysis, leaving a manageable number of alternatives to be evaluated by quantitative benefit-cost analysis according to the principles to be described in Section III. The number and choice of alternatives to be selected for detailed benefit-cost analysis is unavoidably a matter of judgment. There must be some balance between thoroughness of analysis and practical limits to the agency's capacity to carry out analysis.

Alternative regulatory actions that should be explored include the following:

1. *More performance-oriented standards for health, safety, and environmental regulations.* Performance standards are generally to be preferred to engineering or design standards because they allow the regulated parties to achieve the regulatory objective in the most cost-effective way. In general, a performance standard should be preferred wherever that performance can be measured or reasonably imputed. Performance standards should also be applied as broadly as possible without creating too much variation in regulatory benefits; for example, by set-

ting emission standards on a plant-wide or firm-wide basis rather than source by source. It is misleading and inappropriate, however, to characterize a standard as a performance standard if it is set so that there is only one feasible way to meet it; as a practical matter, such a standard is a design standard.

2. *Different requirements for different segments of the regulated population.* For example, there might be different requirements for large and small firms. If such a differentiation is made, it should be based on perceptible differences in the costs of compliance or in the benefits to be expected from compliance. For example, some worker safety measures may exhibit economies of scale, that is, lower costs per worker protected in large firms than in small firms. A heavier burden should not be placed on one segment of the regulated population on the grounds that it is better able to afford the higher cost; this is a sure formula for loading disproportionate costs on the most productive sectors of the economy.
3. *Alternative levels of stringency.*In general, both the benefits and costs associated with a regulation will increase with the level of stringency (although costs will eventually increase more rapidly than benefits). It is important to consider alternative levels of stringency to better understand the relationship between stringency and benefits and costs. This approach will increase the information available to the decisionmaker on the option that maximizes net benefits.
4. *Alternative effective dates of compliance.*The timing of a regulation may also have an important effect on its net benefits. For example, costs of a regulation may vary substantially over different compliance dates for an industry that requires a year or more to plan its production runs efficiently. In this instance a regulation whose requirements provide sufficient lead time is likely to achieve its goals at a much lower overall cost than a regulation that is effective immediately.
5. *Alternative methods of ensuring compliance.* Compliance alternatives include the appropriate entity (local, State or Federal) to enforce compliance, whether compliance is enforced by on-site inspection or periodic reporting, and structuring compliance penalties so that they provide the most appropriate incentives.
6. *Informational measures.* Measures to improve the availability of information include government establishment of a standardized testing and rating system (the use of which could be made mandatory or left voluntary), mandatory disclosure reguirements (e.g., by advertising, labeling, or enclosures), and government provision of information (e.g., by government publications, telephone hot-lines, or public interest broadcast announcements). If intervention is necessary to address a market failure arising from inadequate information, informational remedies will generally be the preferred approaches. As an alternative to a mandatory standard, a regulatory measure to improve the availability of information has the advantage of being a more market-oriented approach. Thus, providing consumers information about concealed characteristics of consumer products gives consumers a greater choice than banning these products (for example, consumers are likely to benefit more from information on energy efficiency than from a prohibition on sale of appliances or automobiles falling below a specified standard of energy efficiency).

Except for prohibiting indisputably false statements (whose banning can be presumed beneficial), specific informational measures must be evaluated in terms of their benefits and costs. Paradoxically, the current state of knowledge does not generally permit the benefits and costs of informational remedies to be measured very accurately. Nonetheless, it is essential to consider carefully the costs and benefits of alternative informational measures, even if they cannot be quantified very precisely. Some effects of informational measures can easily be overlooked. For example, the costs of a mandatory disclosure requirement for a consumer product include not only the obvious cost of gathering and communicating the required information, but also the loss of any net benefits of information displaced by the mandated information, the cost of any inaccurate consumer interpretation of the mandated information, and any inefficiencies arising from the incentive that mandatory disclosure of a particular characteristic gives to producers to overinvest in improving that specific characteristic of their products.

Where information on the benefits and costs of alternative informational measures is insufficient to provide a clear choice between them, as will often be the case, the least intrusive alternative suffi-

cient to accomplish the regulatory objective should be chosen. For example, it will often be sufficient for government to establish a standardized testing and rating system without mandating its use, because firms that score well according to the system will have ample incentive to publicize the fact.

7. *More market-oriented approaches.* In general, alternatives that provide for more market-oriented approaches, with the use of economic incentives replacing command-and-control requirements, should be explored. Market-oriented alternatives that may be considered include fees, subsidies, penalties, marketable rights or offsets, changes in liabilities or property rights, and required bonds, insurance or warranties (in many instances, implementing these alternatives will require legislation).

III. ANALYSIS OF BENEFITS AND COSTS

A. General Principles

The preliminary analysis called for by Sections I and II should have narrowed the number of alternatives to be considered by quantitative benefit-cost analysis to a workable number. Ordinarily, one of the alternatives will be to promulgate no regulation at all, and this alternative will commonly serve as the base from which increments in benefits and costs are calculated for the other alternatives. Even if the alternative of no regulation is not permissible statutorily, it is often desirable to evaluate benefits and costs to determine if statutory change would be desirable.

In some cases the desirability of specific alternatives outside the scope of the agency's regulatory authority may be determined by use of basic economic concepts in light of the principles enumerated in Section I. In other instances, however, only a quantitative benefit-cost analysis can resolve the question, and such alternatives will need to be included in the analysis of this section. In addition, alternative forms of agency regulation will need to be evaluated by quantitative benefit-cost analysis.

1. *Evaluation of Alternatives.* Except where prohibited by law, the primary criterion for choice among alternatives is expected net benefit (benefits minus costs). Other criteria may sometimes produce equivalent results, but they must be used with care to avoid the potentially serious pitfalls to be explained in Part B of this section and in Section IV. Both benefits and costs should be expressed in discounted constant dollars. Appropriate discounting procedures are discussed in the following section.

The distinction between benefits and costs in benefit-cost analysis is somewhat arbitrary, since a positive benefit may be considered a negative cost, and vice versa, without affecting the net benefit (benefits minus costs) decision criterion. This implies that the considerations applicable to benefit estimates also apply to costs and vice versa. The different issues are considered separately under benefits or costs in Sections B and C below according to where they most often arise.

If the proposed regulation is composed of a number of distinct provisions, it is important to evaluate the benefits and costs of the different provisions separately. The interaction effects between separate provisions (such that the existence of one provision affects the benefits or costs arising from another provision), may complicate the analysis, but does not eliminate the need to examine provisions separately. In such a case, the desirability of a specific provision may be appraised by determining the net benefits of the proposed regulation with and without the provision in question. Where the number of provisions is large and interaction effects are pervasive, it is obviously impractical to analyze all possible combinations of provisions in this way. Some judgment must be used to select the most significant or suspect provisions for such analysis.

2. *Discounting.* The monetary values of benefits and costs occurring in different years should be discounted to their present values so that they are comparable. This is not the same as correcting for inflation. An inflation adjustment is made with a price index, whereas discounting to present value is done with a discount rate. Benefits and costs expressed in constant (i.e., unaffected by inflation) dollars must further be discounted to present values before benefits and costs in different years can be added together to determine overall net benefits.

Discounting takes account of the fact that resources (goods or services) in a given year are worth more than identical resources in a later year. The underlying reason for this is that resources can be invested so as to return more resources

later. Partly because of this productivity of investment, individuals value consumption in earlier years higher than consumption in later years.

Modern analysis of discounting for public programs stresses the distinction between two rates of return:

- The *before-tax* rate, also known as the opportunity cost of capital. This is the real rate of return to marginal private investments. Estimates of the opportunity cost of capital in the U.S. economy vary substantially. The 10 percent discount rate specified by OMB Circular A-94 for use in evaluating government programs is intended to represent the opportunity cost of capital.
- The *after-tax* rate, also known as the consumption rate of interest. This represents the rate at which consumers would be willing to exchange present for future consumption, that is, the rate at which consumers must be compensated for postponing their consumption. As with the opportunity cost of capital, alternative estimates of the consumption rate of interest vary significantly. A rate of four percent is reasonably representative of the range of alternative estimates and consistent with a 10 percent before-tax rate of return.

The basic concept underlying the academic literature on public-sector discounting is that economic welfare is ultimately determined by consumption and only indirectly by investment. Therefore, the value of investment must be measured by the value of the subsequent increase in consumption it permits. Any effect that a government program has on investment must be converted to an equivalent time-stream of consumption before being discounted. In practice, this results in a complex procedure that uses the before-tax and after-tax discount rates, a "shadow price of capital," and the impacts of benefits and costs on investment. It is recommended that agencies continue to use the well-understood procedure of discounting by a single rate (as specified by OMB Circular A-94) and, when appropriate, perform additional analysis using the more complex shadow-price-of-capital methodology.

There are two circumstances when it is important to perform sensitivity analysis using the shadow price of capital approach:

(a) Where the costs of the regulation are almost entirely current costs borne by consumers. In such circumstances a low rate close to four percent is called for. (This assumes, as is normally the case, that the benefits are all in the form of disposable income or other benefits directly to individuals.)

(b) Where some of the costs are capital costs financed out of saving *and* there is a long period between the time when most costs are incurred and the time when most benefits accrue. In general, the *smaller* the fraction of costs that are capital costs financed out of saving and the *longer* the time period between costs and benefits, the greater the likelihood that the shadow price of capital approach will be correct.

It is conceptually incorrect to adjust the discount rate as a device to account for the uncertainty of expected future benefits and costs. This procedure will virtually never lead to a correct adjustment of benefits and costs. Therefore, risk and uncertainty should be dealt with according to the principles in Section 3 below and not by changing the discount rate.

3. *Treatment of Risk and Uncertainty.* Where uncertainties exist about important parameters affecting the expected benefits or costs of an alternative under consideration, it is essential to carry out a *sensitivity analysis* to determine the effect on net benefits of plausible variations in the value of the parameters. One form of sensitivity analysis involves calculation of the "switch-point" value of the parameter under examination, that is, the value of the parameter at the break-even point at which the net-benefit decision criterion switches over from favoring one alternative to favoring another. When this break-even point of the parameter value is determined, the analysis may then consider the probability that the true parameter value is above or below the break-even value. For example, if the major uncertainty about a proposed regulation were its cost, the analysis could calculate how high the cost would need to be in order to reduce the net benefit of the proposal to zero. If it is judged to be highly unlikely that the actual cost would be that high or higher, it may be concluded that the choice of the proposed alternative is not sensitive to uncertainties about its cost.

A primary objective of sensitivity analysis is to identify where additional analy-

sis may be most needed. If the choice of a specific regulatory action is sensitive to alternative parameter values that are about equally likely to be true, more research to better determine the true parameter value could be very valuable.

Wherever parameter estimates are uncertain, for either benefits or costs, most-likely estimates (in statistical terms, unbiased estimates or expected values) should be presented. Hypothetical best-case or worst-case estimates may be presented as alternatives for sensitivity analysis. Where possible, information about the probability distribution of the parameter estimate should be presented.

A common situation that arises in estimating both benefits and costs is that a number of different studies may exist which together provide a range of different estimates for a particular parameter. In general, it is not appropriate to use the midpoint of the range of extreme values provided by the studies. Such a technique ignores the information provided by all studies except those providing the extreme values, which may be the least reliable. The preferred approach to deriving a most-likely estimate of a particular parameter in this situation would be to derive it as a weighted average of the estimates of the individual studies, with the weight of each estimate being based on the reliability (in the best judgment of the agency) of the study that produced it.

Where expected future benefits or costs are uncertain, their value to those who receive them may be different from their value if they were certain. (Often, but not always, a certain future benefit is worth more to people than an uncertain future benefit with the same expected value.) As noted in the previous section, it is incorrect to adjust the discount rate as a device to account for the riskiness of future benefits or costs. Any allowance for risk should be made by adjusting the monetary values (for the year in which they occur) of the uncertain benefits and costs so that they are expressed in terms of their "certainty-equivalents."

For an uncertain benefit in future year X, the certainty-equivalent is the number of certain dollars in year X that the uncertain benefit is worth to its recipient. For example, suppose that a particular regulation reduces the probability of fire in a particular type of facility. As part of a benefit-cost analysis for this regulation, the dollar value of the expected reduction in fire loss would be calculated. The owners of the protected facilities place a higher dollar value on the risk of a fire than the expected dollar value of the loss. This is demonstrated by their willingness to pay for fire insurance. Therefore, their relative net cost (the percentage difference between insurance premiums and insurance company claim payments) for fire insurance can be used to increase the expected dollar value of the reduction in fire loss to its certainty-equivalent value.

In the example of the preceding paragraph, the adjustment for risk would involve an increase in the value of the benefit, whereas uncertainty of a benefit is normally thought to reduce its certainty-equivalent value. The reason is that even though this benefit by itself is uncertain, it acts to reduce the overall level of risk that would prevail in the absence of the regulation. This illustrates the important principle that what matters is not the variability or riskiness of a regulation's net benefits by themselves, but the regulation's effect on risk and uncertainty overall.

While an adjustment to account for risk may be called for in the fire-risk example given, a similar adjustment for the value of reductions in fatalities and injuries would not be appropriate. Assuming that the values of fatalities and injuries have been derived by the willingness-to-pay methodology recommended in section B.2 below, they would already represent the certainty-equivalent value of the uncertain risk. This is because the estimated dollar values represent the certain dollar amounts that individuals would sacrifice to reduce these risks.

Probably in most cases it will not be advisable to adjust for risk and uncertainty. As a theoretical matter, no adjustment for risk is necessary wherever the net benefits are widely dispersed among many individuals and are not correlated with disposable income. And in cases where this does not apply, risk may be relatively unimportant or may already be taken into account by use of the willingness-to-pay methodology. In other cases, there may be no practical way to quantify the value of changes in risk.

4. *Assumptions.* Where benefit or cost estimates are heavily dependent on certain assumptions, it is essential to make these assumptions explicit and, where alternative assumptions are plausible, to carry out sensitivity analyses based on plausi-

ble alternative assumptions. If the decision criterion proves to be sensitive to alternative plausible assumptions, this may necessitate further research to develop more evidence on which of the alternative assumptions is the most appropriate. Because the adoption of a particular estimation methodology sometimes implies major hidden assumptions, it is important to analyze estimation methodologies carefully to make hidden assumptions explicit.

5. *International Trade Effects.* In calculating the benefits and costs of a proposed regulatory action, generally no explicit distinction needs to be made between domestic and foreign resources. If, for example, compliance with a proposed regulation requires the purchase of specific equipment, the opportunity cost of that equipment is ordinarily best represented by its domestic cost in dollars, regardless of whether the equipment is produced domestically or imported. The relative value of domestic and foreign resources is correctly represented by their respective dollar values, because the foreign exchange value of the dollar is determined by a free exchange market. Nonetheless, an awareness of the role of international trade may be quite useful for assessing the benefits and costs of a proposed regulatory action. For example, the existence of foreign competition usually makes the demand curve facing a domestic industry more elastic than it would be otherwise. Elasticities of demand and supply frequently can significantly affect the magnitude of the benefits or costs of a regulation.

A regulation that discriminates unjustifiably against foreign exporters is a form of economic protectionism. The economic loss to the U.S. due to the fact that protectionism is economically inefficient will be reflected in the net benefit estimate of any properly conducted benefit-cost analysis. However, a benefit-cost analysis will generally not be able to measure the potential U.S. loss from the threat of future retaliation by foreign governments. Therefore, special attention should be given to any possibility that a regulation would unjustifiably discriminate between domestic and foreign producers and consumers—both discrimination against foreigners and discrimination in favor of foreigners.

The fact that a regulation has a differential effect on foreigners as compared to Americans does not necessarily constitute discrimination. If, for example, an automobile safety standard could be complied with less expensively by large cars than by small cars, such a standard would be more favorable to American car producers, who produce relatively more large cars compared to the fleet mix of foreign producers. Nonetheless, such a differential effect would not be discriminatory if the difference in compliance cost between large and small cars was necessary to achieve legitimate regulatory objectives in the most efficient way.

If a regulation has an adverse differential effect on foreign producers or consumers relative to domestic producers and consumers that is not necessary to realize regulatory goals efficiently, then a discriminatory effect on foreign trade exists. The RIA should identify any substantial differential effect on international trade and explain why it is necessary to achieve legitimate regulatory goals in the most efficient way. One means for reducing the likelihood of international discrimination would be for a U.S. product standard for an internationally traded good to be based on an international standard, wherever an international standard exists and is compatible with the health, safety, or environmental needs of the U.S. International harmonization can be beneficial for regulations directly setting standards for internationally traded goods or services. For example, it would be appropriate to consider international harmonization in setting safety standards for automobiles. There is no similar advantage to international harmonization where a regulation does not directly affect the quality of an internationally traded good or service, even if it indirectly affects its costs (e.g., environmental controls for automobile plants).

B. Benefit Estimates

The RIA should state the beneficial effects of the proposed regulatory change and its principal alternatives. In each case, there should be an explanation of the mechanism by which the proposed action is expected to yield the anticipated benefits. An attempt should be made to quantify all potential real incremental benefits to society in monetary terms to the maximum extent possible. A schedule of monetized benefits should be included that would show the type of benefit and when it would accrue; the numbers in this table should be expressed in constant,

undiscounted dollars. Any expected incremental benefits that cannot be monetized should be explained.

The RIA should identify and explain in detail the data or studies on which benefit estimates are based. Where benefit estimates are derived from a statistical study, the RIA must provide sufficient information so that an independent observer can determine the representativeness of the sample, whether it was extrapolated from properly in developing aggregate estimates, and whether the results are statistically significant.

For regulations addressing health and safety risks, the calculation of potential benefits should derive from the agency's estimate of the mean expected value of the reduction in risk attributable to the standard. Estimates of the prevailing level of risk and of the reduction in risk to be anticipated from a proposed standard should be unbiased most-likely estimates rather than hypothetical worst-case estimates. Extreme safety or health results should be weighted (along with intermediate results) by the probability of their occurrence to estimate the expected result implied by the available evidence. In addition, to the extent possible, the distribution of probabilities for various possible results should be presented separately, so as to allow for an explicit margin of safety, where required, in final decisions. If a margin of safety is to be provided, the proper place for it is the final stage of the decision-making process, not by adjusting the risk or benefit estimates in a conservative direction at the information-gathering or analytical stages of the process. Conservative estimates should be presented as alternatives to best estimates for sensitivity analysis, but should not substitute for them.

It is important to guard against double-counting of benefits. For example, if a regulation improved the quality of the environment in a community, the value of real estate in the community might rise, reflecting the greater attractiveness of living in the improved environment. It would ordinarily be incorrect to include the rise in property values among the benefits of the regulation. Ordinarily, the value of environmental benefits (e.g., reduced health risks, scenic improvements) will already be included among the benefits. The rise in property values reflects the capitalized value of these improvements. Therefore, to count as benefits both the value of the environmental improvements and the corresponding increase in property values is to count the same benefits twice. Only where a direct estimate of the benefits has not been included would it be appropriate to include the increase in property values among the benefits.

1. *Principles for Valuing Benefits.* Ordinarily, goods and services are to be valued at their market prices. However, in some instances, the market value of a good or service may not reflect its true value to society. If a regulatory alternative involves changes in such a good or service, its monetary value for purposes of benefit-cost analysis should be derived using an estimate of its true value to society (often called its "shadow price"). For example, suppose a particular air pollutant damages crops. One of the benefits of controlling that pollutant will be the value of the crop saved as a result of the controls. If the price of that crop is held above the free-market equilibrium price by a government price-support program, it would overstate the value of the benefit of controlling the pollutant if the crop saved were valued at the market price established by the support program. The social value of the benefit should be calculated using a shadow price for crops subject to price supports. The estimated shadow price should reflect the value to society of marginal uses of the crop (e.g., the world price if the marginal use is for exports). If the marginal use is to add to very large surplus stockpiles, the shadow price would be the value of the last units released from storage, minus storage cost. Therefore, where stockpiles are large and growing, the shadow price is likely to be low and could well be negative.

   In some important instances, a benefit does not correspond to a good or service traded in the marketplace. Important examples include reductions in health and safety risks, savings in time, and environmental amenities such as scenic vistas. To estimate the monetary value of a benefit that is not traded directly in the marketplace, the willingness-to-pay valuation methodology is conceptually superior, because the amount that people are willing to pay for a good or service is the best measure of its value to them. As noted in the following section, where there are practical obstacles to the accurate application of the willingness-to-pay methodology, alternative methods may be used. Methods for estimating the value of travel time include estimates based on wage rates and statistical studies of travelers'

choices among alternative travel modes. Methods for estimating the value of environmental and recreational amenities include travel-cost and contingent-valuation estimation methods. The following section outlines the principles for valuing the most important type of nonmarketed benefit: reductions in health and safety risks.

2. *Valuation of Health and Safety Benefits.* For health and safety benefits, a distinction should be made between risks of nonfatal illness or injury and fatality risks.
   (a) *Nonfatal illness and injury.* Although the willingness-to-pay approach is conceptually superior, the current state of empirical research in the area is not sufficiently advanced to assure that estimates derived by this method are necessarily superior to direct-cost valuations of reductions in risks of nonfatal illness or injury. Any injury-value estimate from a willingness-to-pay study is necessarily an average over a specific combination of injuries of varying severity. If the average injury severity in such a study is greatly different from that for the regulatory action under study, then the study's estimated injury value may not be appropriate for evaluating that action. Accordingly, the agency should use whichever approach it considers most appropriate for the decision at hand. The primary components of the direct-cost approach are medical costs and the value of lost production. Possibly important costs that may be omitted by the use of the direct-cost approach are the value of pain and suffering, and the value of time lost from leisure and other activities that are not economically directly productive.
   (b) *Fatality.* Reductions in fatality risks are best monetized according to the willingness-to-pay approach. The value of changes in fatality risk is sometimes expressed in terms of the "value of life." This is something of a misnomer, since the value of a life really refers to the sum of many small reductions in fatality risk. For example, if the annual risk of death is reduced by one in a million for each of two million people, that represents two "statistical lives" saved per year (two million × one millionth = two). If the annual risk of death is reduced by one in 10 million for each of 20 million people, that also represents two statistical lives saved. The conclusion that the fatality risk reductions in these two cases are equivalent implies an assumption. The implicit assumption—that equal increments in risk are valued equally—allows different risk increments to be added together and compared directly. As a different example, suppose there are two alternative reductions in the annual risk faced by an individual:

A: from $.10\times10^{-5}$ to $.09\times10^{-5} = .01\times10^{-5}$
B: from 1.00×10^{-5} to $.99\times10^{-5} = .01\times10^{-5}$

Since in both cases the reduction in annual risk is the same ($.01\times10^{-5}$), the value of A and B should be considered the same.

The assumption that equal increments in fatality risk are of equal value is a legitimate one, so long as the level of fatality risk is below 10^{-4} annually. There is evidence that the willingness-to-pay value for increments in fatality risk does not change significantly over a wide range of risk exposure below 10^{-4} annually.

For levels of annual risk exposure of 10^{-4} and above, it cannot be assumed that equal increments of risk are valued equally. At these higher risk levels, it is particularly important to distinguish between situations of voluntary risk assumption and those of involuntary risk. Where the high risk is involuntary, it is appropriate to value reductions in risk from that high level more highly than equal risk reductions at lower risk levels. In general, the greater the risk that an individual bears, the higher will be the value the individual places on marginal changes in risk. On the other hand, where a high risk is chosen voluntarily those assuming the risk tend to be persons who place a relatively low value on averting safety risks. Empirical studies of risk premiums in high-risk occupations suggest that reductions in voluntarily assumed high risks should be valued less than equal risk reductions at ordinary risk levels.

Estimates of the value of fatality risks refer only to changes in an uncertain risk of death. They have no application to the certain prevention

of the death of an identifiable individual.

3. *Alternative Frameworks for Health and Safety Benefits.* Several alternative ways of incorporating fatality risks into the framework of benefit-cost analysis may be appropriate. These may involve either explicit or implicit valuation of fatality risks.

One acceptable explicit valuation approach would be for the agency to select a single value for reductions in fatality risk at ordinary risk levels (below 10^{-4} annually) and use this value consistently for evaluating all its programs that affect ordinary fatality risks. Another acceptable explicit valuation approach would be to use a range of values for reductions in fatality risk and apply sensitivity analysis as with other parameters that have alternative plausible values. The range of alternative values should be a reasonable one, not one that includes the most extreme upper and lower values of fatality risk reduction that have been estimated. Extreme values are more appropriate for instances of extraordinarily high risks (above 10^{-4} annually), with the extreme low values being appropriate where voluntary assumption of high risk leads to self-selection and the extreme high values being appropriate where the high risk is involuntarily assumed.

Where the analysis uses a range of alternative values for reductions in fatality risk, it may be useful to calculate break-even values, as in other sensitivity analyses. This requires calculating the borderline value of reductions in fatality risk at which the net benefit decision criterion would switch over from favoring one alternative to favoring another (i.e., the value of fatality risk at which the net benefits of the two alternatives are equal). This method will frequently be infeasible because of its computational demands or because alternatives are continuous rather than discrete (e.g., alternative stringencies for exposure levels), but where appropriate, it is a useful supplement to the sensitivity analysis.

An implicit valuation approach could entail calculations of the cost per unit of reduction in fatality risk (cost per "statistical life saved"), with costs defined as costs minus monetized benefits. This must be used with care, since there is a serious potential pitfall: It is *not* correct to choose between two mutually exclusive alternatives by selecting the alternative with lowest cost per statistical life saved. The alternative with higher cost per life saved may nonetheless be the alternative with the higher net benefit to society.

The way to avoid this pitfall while retaining the implicit valuation approach is to make all calculations of cost per life saved in terms of increments between alternatives. Alternatives should be arrayed in order of their total reduction in expected fatalities and the incremental cost per life saved calculated between each adjacent pair of alternatives. In contrast to explicit valuation approaches, this avoids the necessity of specifying in advance a value for reductions in fatality risks. However, a range of values will be implied by the final selection of an alternative. This range should be consistent with estimated values of reductions in fatality risks calculated according to the willingness-to-pay methodology.

Another way of expressing reductions in fatality risks is in terms of life-years saved. For example, if a regulation protected individuals whose average remaining life expectancy was 40 years, then a risk reduction of one fatality would be expressed as 40 life-years saved. Such a refinement may be desirable for regulations that disproportionately protect young people (e.g., motor vehicle safety regulations) or elderly people (e.g., regulations controlling carcinogens). To derive the value of a life-year saved from an estimate of the value of life, first determine the average remaining life expectancy of the sample population in the study from which the estimate was drawn. Assuming that the average age of the sample population is known, the average remaining life expectancy may be derived from actuarial tables giving life expectancy in relation to age. Using standard compound interest tables, the value of a life-year saved can then be determined as the estimated value of life annualized over a period equal to the number of years of remaining average life expectancy.

C. Cost Estimates

1. *General Considerations.* The important economic concept of *opportunity cost* is relevant to benefit-cost analyses of regulations, as it is to other types of economic analyses. The opportunity cost of an alternative is the value of the benefits foregone as a consequence of that alternative. For example, the opportunity cost of banning

a product (e.g., a drug, food additive or hazardous chemical) is the foregone net benefit of that product. It is measured by changes in producers' and consumers' surpluses. (Producers' surplus is the difference between the amount a producer is paid for a unit of a good and the minimum amount the producer would accept to supply that unit. It is measured by the distance between the price and the supply curve for that unit. Consumers' surplus is the difference between what a consumer pays for a unit of a good and the maximum amount the consumer would be willing to pay for that unit. It is measured by the distance between the price and the demand curve for that unit.) As another example, even if a resource required by regulation does not have to be paid for because it is already owned by the regulated firm, nonetheless the use of that resource to meet the regulatory requirement has an opportunity cost equal to the net benefit it would have provided in the absence of the requirement. Any such foregone benefits for an alternative should be monetized wherever possible and either added to the costs or subtracted from the benefits of that alternative. Any costs that are averted as a result of an alternative should be monetized wherever possible and either added to the benefits or subtracted from the costs of that alternative.

All costs calculated should be incremental, that is, they should represent changes in costs that would occur if the regulatory alternative is chosen compared to costs in the base case (ordinarily no regulation or the existing regulaton). Future costs that would be incurred even if the regulation is not promulgated, as well as costs that have already been incurred (sunk costs), are not part of incremental costs. If marginal cost is not constant for any component of costs, incremental costs should be calculated as the area under the marginal cost curve over the relevant range.

Costs include private-sector compliance costs, government administrative costs and costs of reallocating workers displaced as a result of the regulation. Costs that are not monetary outlays must be included and should be attributed a monetary value wherever possible. Such costs may include the value (opportunity cost) of benefits foregone, losses in consumers' or producers' surpluses, discomfort or inconvenience, and loss of time. A schedule of monetized costs should be included that would show the type of cost and when it would occur; the numbers in this table should be expressed in constant, undiscounted dollars. Any expected incremental costs that cannot be monetized should be explained. An important type of cost that often cannot be quantified is a slowing in the rate of innovation or of adoption of new technology. For example, regulations requiring a costly and time-consuming approval process for new products or new facilities may have such costs, as may regulations setting much more stringent standards for new facilities than existing ones.

Two accounting cost concepts that should not be counted as costs in benefit-cost analysis are interest and depreciation. The time value of money is already accounted for by the discounting of benefits and costs. Depreciation is already taken into account by the time distribution of benefits and costs; the only legitimate use for depreciation calculations in benefit-cost analysis is to estimate the salvage value of a capital investment.

2. *Real Costs versus Transfer Payments.* An important, but sometimes difficult, problem in cost estimation is to distinguish between real costs and transfer payments. Transfer payments are not genuine costs, but payments for which no real good or service is received in return. Several examples of problems that may arise from the confusion between transfer payments and real costs (or benefits) may help to identify situations in which further analysis of the problem may be warranted. Monopoly profits, insurance payments, government subsidies and taxes, and distribution expenses are four potential problem areas.

   (a) *Monopoly profits.* If, for example, sales of a competitively produced product were restricted by a government regulation so as to raise prices to consumers, the resulting monopoly profits are not a benefit of the rule, nor is their payment by consumers a cost. The real benefit-cost effects of the regulation would be represented by changes in producers' and consumers' surpluses.

   (b) *Insurance payments.* Potential pitfalls in benefit-cost analysis may also arise in the case of insurance payments, which are transfers. Suppose, for example, a worker safety regulation, by decreasing employee injuries,

led to reductions in firms' insurance premium payments. It would be incorrect to count the amount of the reduction in insurance premiums as a benefit of the rule. The proper measure of benefits is the value of the reduction in worker injuries, monetized as described previously, plus any reduction in real costs of administering insurance (such as the time of insurance company employees needed to process claims) due to the reduction in worker insurance claims. Reductions in insurance premiums that are matched by reductions in insurance claim payments are changes in transfer payments, not benefits.

(c) *Indirect taxes and subsidies.* A third instance where special treatment may be needed to deal with transfer payments is the case of indirect taxes (tariffs or excise taxes) or subsidies on specific goods or services. Suppose a regulation requires firms to purchase a $10,000 piece of imported equipment, on which there is a $1,000 customs duty. For purposes of benefit-cost analysis the cost of the regulation for each firm ordinarily would be $10,000, not $11,000, since the $1,000 customs duty is a transfer payment from the firm to the Treasury, not a real resource cost. This approach, which implicitly assumes that the equipment is supplied at constant costs, should be used except in special circumstances. Where the taxed equipment is not supplied at constant cost, the technically correct treatment is to calculate how many of the units purchased as a result of the regulation are supplied from increased production and how many from decreased purchases by other buyers. The former units would be valued at the price without the tax and the latter units would be valued at the price including tax. This calculation is usually difficult and imprecise, because it requires estimates of supply and demand elasticities, which are often difficult to obtain and inexact. Therefore, this treatment should only be used where the benefit-cost conclusions are likely to be sensitive to the treatment of the indirect tax. While costs ordinarily should be adjusted to remove indirect taxes on specific goods or services as described here, similar treatment is not warranted for other taxes, such as general sales taxes applying equally to most goods and services or income taxes.

(d) *Distribution expenses.* The treatment of distribution expenses is also a source of potential error. For example, suppose a particular regulation raises the cost of a product by $100 and that wholesale and retail distribution expenses are on average 50 percent of the factory-level cost. It would ordinarily be incorrect to add a $50 distribution markup to the $100 cost increase to derive a $150 incremental cost per product for benefit-cost analysis. Most real resource costs of distribution do not increase with the price of the product being distributed. In that case, either distribution expenses would be unchanged or, if they increased, the increase would represent distributor monopoly profits. Since the latter are transfer payments, not real resource costs, in neither case should additional distribution expenses be included in the benefit-cost analysis. However, increased distribution expenses should be counted as costs to the extent that they correspond to increased real resource costs of the distribution sector as a result of the change in the price or characteristics of the product.

D. Expenditure Rules

Regulations establishing terms or conditions of Federal grants, contracts, or financial assistance call for a different form of regulatory analysis than do other types of regulation. In some instances, a full-blown benefit-cost analysis may be appropriate to inform Congress and the President more fully about the desirability of the program, but this would not ordinarily be required in a Regulatory Impact Analysis. The primary function of the RIA for this type of regulation should be to verify that the terms or conditions are the minimum necessary to achieve the purposes for which the funds were appropriated. They should not contain conditions in pursuit of goals that are not germane to the purpose for which the funds were authorized and appropriated. Beyond controls to prevent abuse and to ensure that funds appropriated to achieve a specific purpose are channeled efficiently toward that end, maximum discretion should be allowed in the use of Federal funds, particularly when the recipient is a State or local government.

IV. RATIONALE FOR CHOOSING THE PROPOSED REGULATORY ACTION

The RIA should include an explanation of the reasons for choosing the selected regulation. Ordinarily, the regulatory alternative selected should be the one that achieves the greatest net benefits. If legal constraints prevent this choice, they should be identified and explained, and their net cost should be estimated.

Where uncertainties are substantial or a large proportion of benefits cannot be monetized, other methods of summarizing the benefit-cost analysis besides in the form of net benefits may sometimes be appropriate. When alternative forms of presentation are used, the objective must continue to be the maximization of net benefits (except where prohibited by law). Alternative criteria must be used with care because of the potential for errors or misinterpretation.

Agencies need not calculate the internal rate of return for a regulation. The internal rate of return is often difficult to compute and is problematical when multiple rates exist. It must not be used as a criterion for choosing between mutually exclusive alternatives. As a criterion for choosing between alternatives that are not mutually exclusive it has no advantages over the criterion of maximizing the present value of net benefits.

Benefit-cost ratios, if used at all, must be used with care to avoid a common pitfall. It is a mistake to choose among mutually exclusive alternatives by selecting the alternative with the highest ratio of benefits to costs. An alternative with a lower benefit-cost ratio than another may have the higher net benefits. Whether a regulation's benefits are greater (or less) than its costs can be determined by whether its benefit-cost ratio is greater (or less) than one. The benefit-cost ratio may be used as a very simplified indicator of the likely sensitivity of the result: If the benefit-cost ratio is much greater than one, the conclusion that regulation's benefits exceed its costs probably is not sensitive to likely alternative parameter values. If the ratio is only slightly greater than one, the conclusion probably is sensitive. The benefit-cost ratio may sometimes be acceptable as a rough substitute for genuine sensitivity analysis where it is not feasible to carry out a full sensitivity analysis (e.g., if the number of regulatory parameters to be tested by sensitivity analysis is large). When so used, the benefit-cost ratio should be recognized as only a crude approximation to a genuine sensitivity analysis and the analyst should be aware of its limitations (e.g., the benefit-cost ratio is sensitive to the arbitrary classification of an item as a benefit or an averted cost).

Where the benefits of proposed regulatory alternatives include reductions in fatality risks, an acceptable alternative to direct calculation of net benefits is the indirect approach of calculating incremental costs per life saved between adjacent alternatives. This is done by ranking all the alternatives according to the number of lives they save and then calculating the change in costs and the change in lives saved between each alternative and the one with the next highest number of lives saved. If the alternative selected is the one whose incremental cost per life saved is closest to the willingness-to-pay value of life, this decision criterion is analytically equivalent to that of maximizing net benefit.

In cases where important benefits cannot be assigned monetary values, cost-effectiveness analysis should be used where possible to evaluate alternatives that generate equivalent nonmonetizable benefits. Costs should be calculated net of monetized benefits. Between two alternatives with equivalent nonmonetizable benefits, the alternative with the lower net costs should be selected. Cost-effectiveness analysis should also be used to compare regulatory alternatives in cases where the level of benefits is specified by statute.

V. STATUTORY AUTHORITY

The RIA should include a statement of determination and explanation that the proposed regulatory action is within the agency's statutory authority.

Further Reading

Edith Stokey and Richard Zeckhauser, *A Primer for Policy Analysis.* Chapters 9 and 10 provide a good introduction to basic concepts.

E. J. Mishan, *Economics for Social Decisions: Elements of Cost-Benefit Analysis.* Assumes some knowledge of economics. Chapters 5-8 should be helpful on the important subjects of producers' and consumers' surpluses (not discussed extensively in this guidance document).

W. Kip Viscusi, *Risk By Choice.* Chapter 6 is a good starting point for the topic of valuing health and safety benefits. Other, more technical, sources are given in the bibliography.