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APPENDIX I

ENVIRONMENTAL EFFECTS ABROAD OF MAJOR NAVY ACTIONS

Ref: (a) Executive Order 12114
(b) DoD Directive 6050.7

1. Purpose. Reference (a) requires consideration for actions that do significantly affect the environment outside the United States; i.e., the global commons, the environment of a foreign nation, or impacts on protected global resources. This appendix establishes internal procedures to achieve the purposes of reference (a) and implement reference (b).

2. Responsibilities

a. The Deputy Under Secretary of the Navy coordinates communications with foreign governments concerning environmental agreements, studies or other formal arrangements concerning environmental matters through the Department of State.

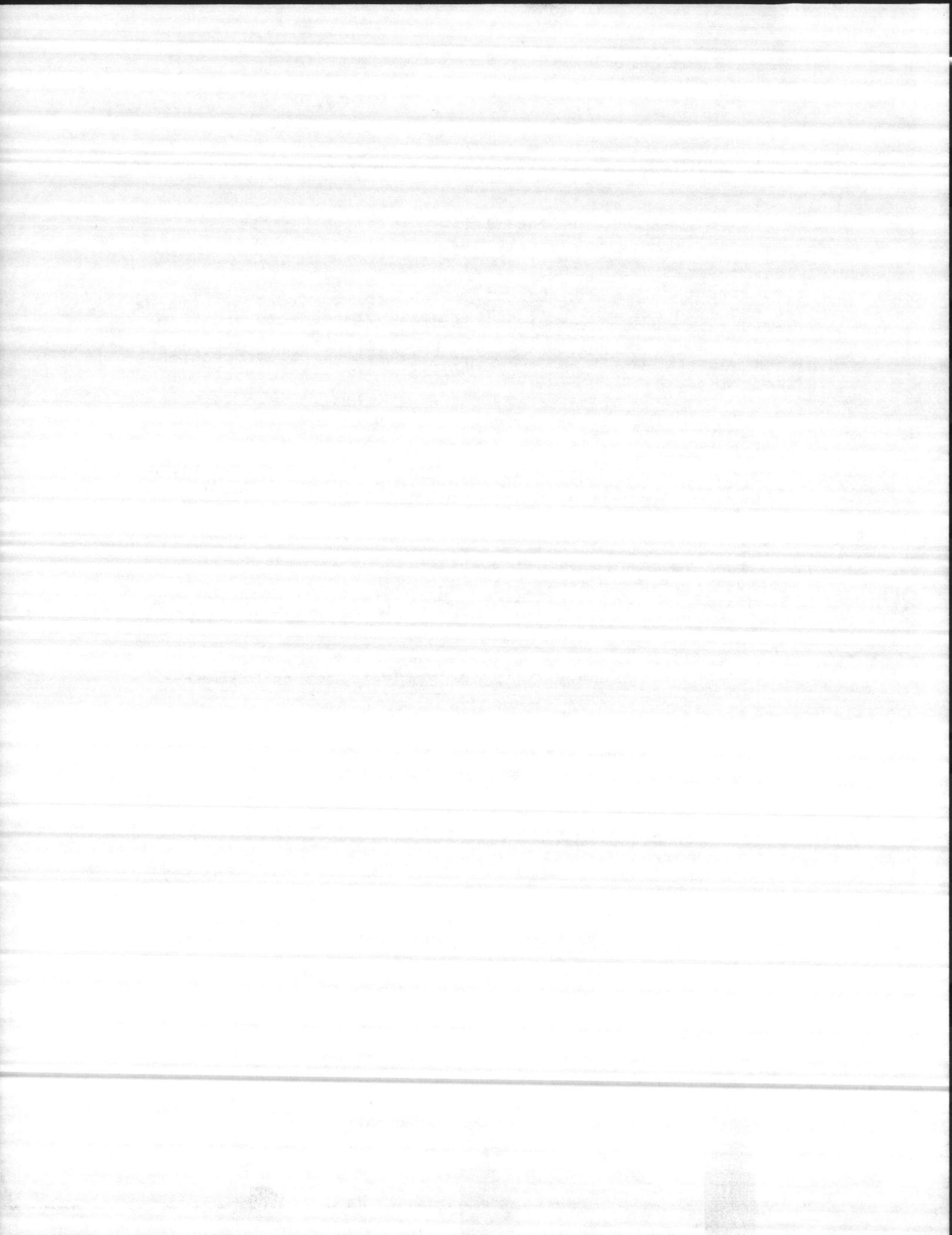
b. The Deputy Chief of Naval Operations (Logistics) (Op-04), and specifically the Environmental Protection and Occupational Safety and Health Division (Op-45) is responsible for:

(1) Advising commands of the requirement for submitting environmental documentation.

(2) Coordination with the President's Council on Environmental Quality, the Assistant Secretary of Defense (MRA&L), the Deputy Under Secretary of the Navy, the Assistant Secretary of the Navy (MRA&L) and other DoD components and Federal agencies concerned with environmental matters.

(3) Distribution of environmental analyses in accordance with reference (b) and required Federal Register publication.

(4) Providing assistance for actions initiated by private persons, state or local agencies and other non-Navy/DoD entities for which Navy involvement may be reasonably foreseen.



(5) Identifying major decision points wherein environmental effects of actions abroad shall be considered as associated with naval actions.

c. Commanders, commanding officers and subordinate commands are to comply with this appendix by:

(1) Conducting environmental analyses of the environmental effects of proposed actions in accordance with the requirements of this appendix.

(2) Forward all required environmental analyses to CNO (Op-45) for review and appropriate disposition.

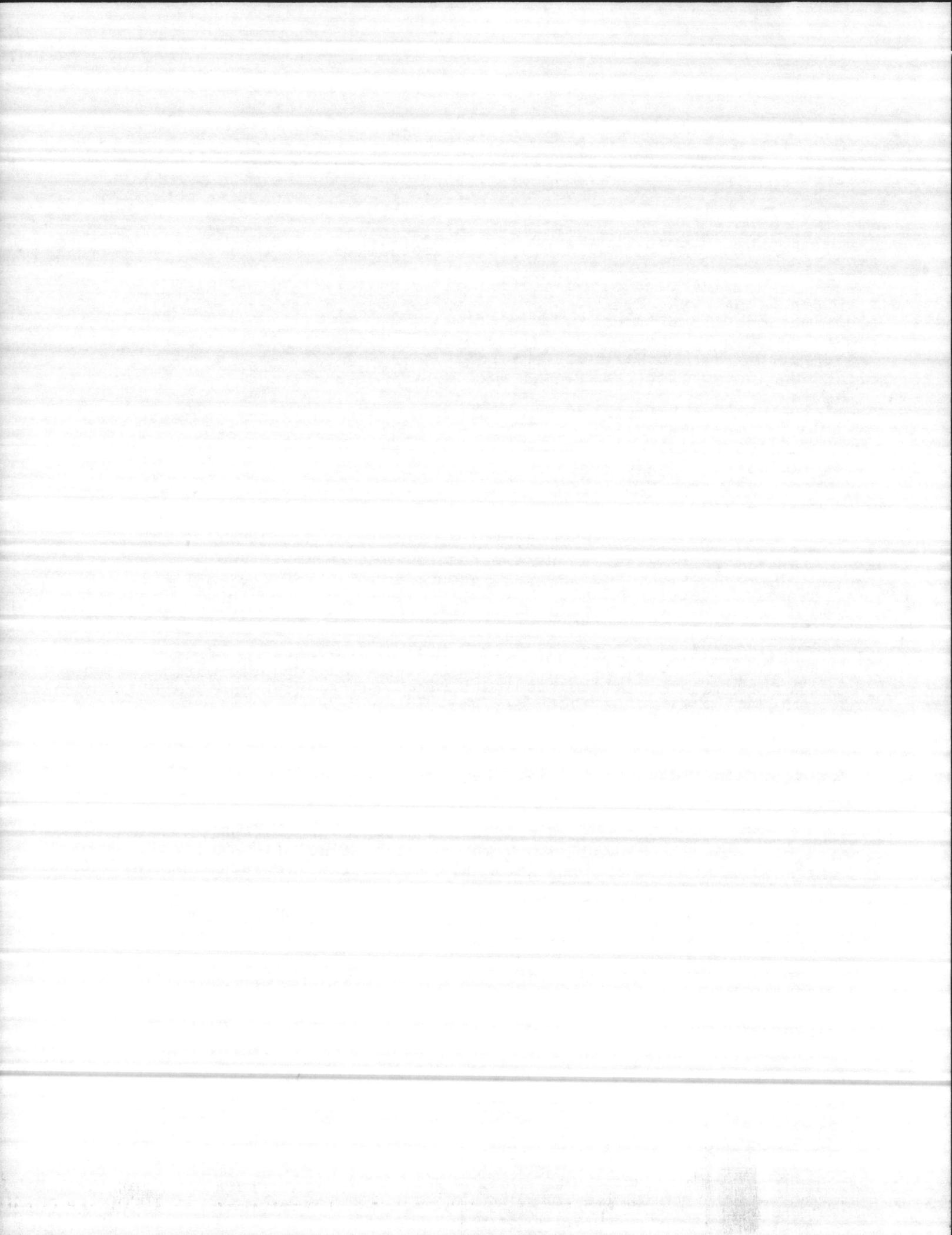
(3) Refraining from taking any but emergency actions which would significantly harm the subject environments pending review of environmental analyses until either the expiration of any required publication/comment periods or approval from CNO (Op-45).

3. Definitions. As used in this appendix.

a. Environment means the natural and physical environment, and it excludes social, economic and other environments.

b. Federal action means an action that is implemented or funded directly by the United States Government. It does not include actions in which the United States participates in an advisory, information gathering, representational, or diplomatic capacity (but does not implement or fund the action), actions taken by a foreign government or in a foreign country in which the United States is a beneficiary of the action (but does not fund or implement the action), or actions in which foreign governments use funds derived indirectly from the United States.

c. Foreign nation means any geographic area (land, water, and airspace) that is under the jurisdiction of one or more foreign governments; any area under military occupation by the United States alone or jointly with any other foreign government; and any area that is the responsibility of an international organization of governments. "Foreign nation" includes contiguous zones and fisheries zones of foreign nations. "Foreign government" in this context includes governments regardless of whether recognized by the United States, political factions, and organizations that exercise governmental power outside the United States.



d. Global commons are geographical areas that are outside the jurisdiction of any nation, and include the oceans outside territorial limits and Antarctica. Global commons do not include contiguous zones and fisheries zones of foreign nations.

e. Major action means an action of considerable importance involving substantial expenditures of time, money, and resources, that affects the environment on a large geographic scale or has substantial environmental effects on a more limited geographical area and one that is substantially different or a significant departure from other actions (previously analyzed with respect to environmental considerations) and approved, but with which the action under consideration may be associated. Deployment of ships, aircraft, or other mobile military equipment is not a major action for purposes of this appendix.

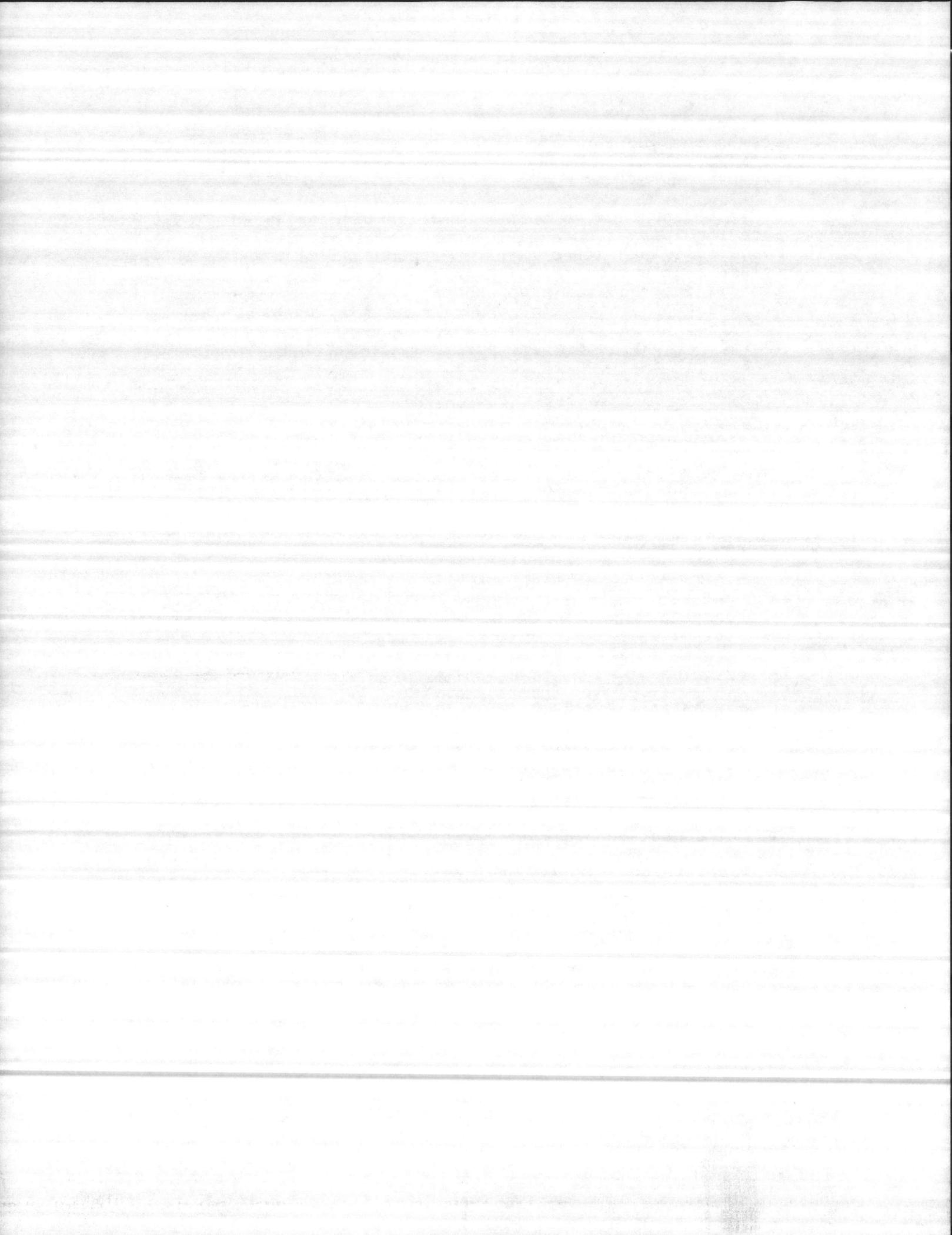
f. United States means all states, territories, and possessions of the United States; and all waters and air-space subject to the territorial jurisdiction of the United States. The territories and possessions of the United States include the Virgin Islands, American Samoa, Wake Island, Midway Island, Guam, Palmyra Island, Johnston Atoll, Navassa Island, and Kingman Reef.

g. Lead agency means the agency among many preparing or having taken the primary responsibility for preparing the environmental analyses required under this appendix, reference (a) or reference (b).

4. Policy

a. As an element of the Department of Defense, the Navy is mindful of its responsibilities toward other nations and its shared stewardship of the global commons. Accordingly, the Navy will take account of environmental considerations in accordance with the following sections of this instruction: Section 7, when the Navy acts in a foreign nation; and Section 6, when the Navy acts in the global commons or impacts a protected global resource.

b. Foreign policy considerations require coordination with the Department of State concerning environmental agreements, and other formal arrangements. Consultation with the Department of State is also required in connection with the utilization of additional exemptions from this instruction under section 7(1)(b)(1). All coordination and consultation will be accomplished by the Deputy Under



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Secretary of the Navy who will in turn coordinate through the Assistant Secretary of Defense (International Security Affairs). Informal working-level communications and arrangements are not included in this coordination requirement. Other than these informal working level arrangements, no communications concerning environmental matters should be transmitted without coordination with CNO (Op-45).

5. General. The following generalities apply with equal force to any environmental analysis required by this appendix.

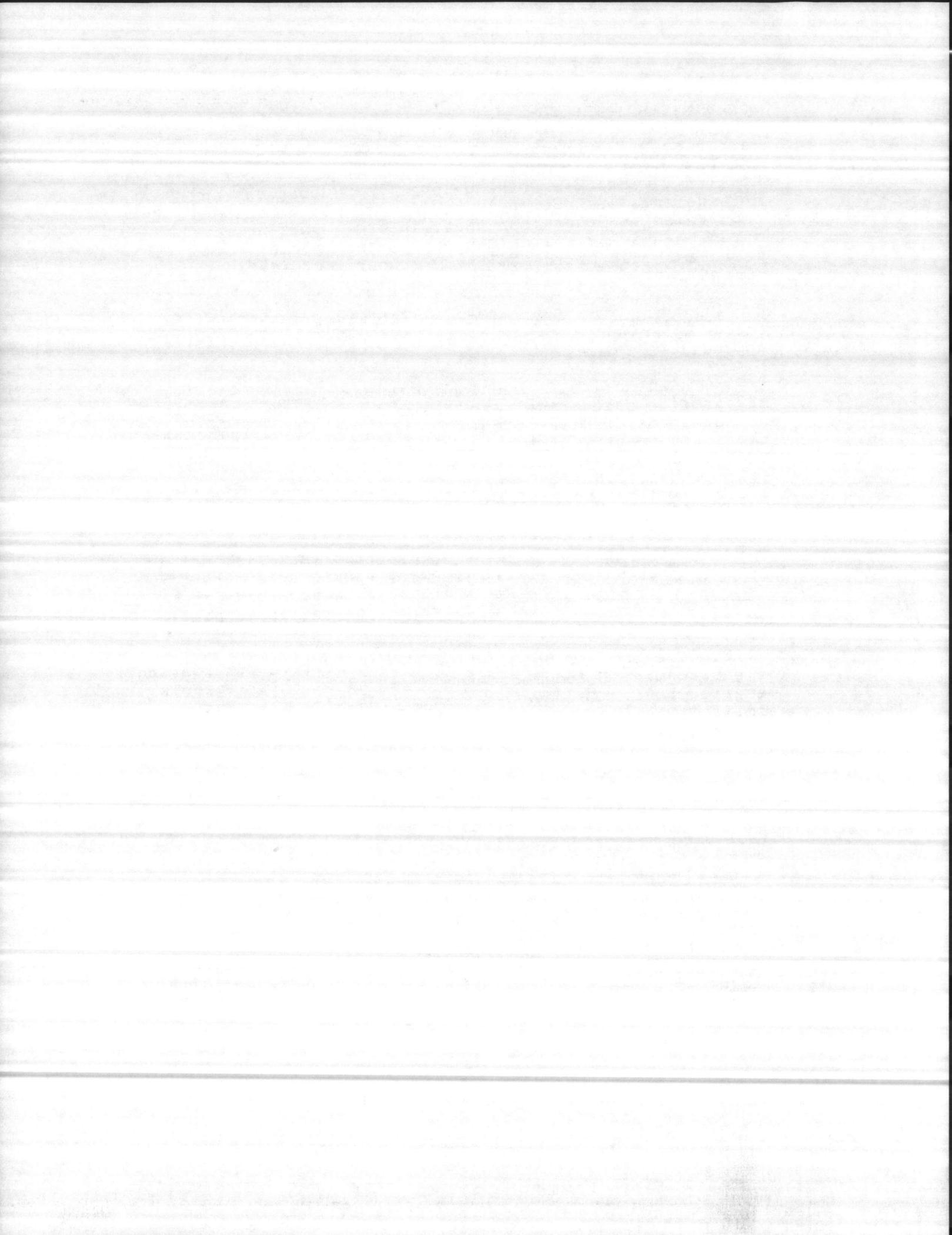
a. Categorical exclusions. The Department of Defense may provide categorical exclusions for actions that normally do not, individually or cumulatively, do significant harm to the environment. If an action is covered by a categorical exclusion no environmental assessment or environmental statement is required. Categorical exclusions will be established by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) and promulgated by changes to this appendix. Navy elements identifying recurring actions that have been determined, after analysis, not to do significant harm to the environment should submit recommendations for categorical exclusions (with accompanying justification) to CNO (Op-45) for evaluation and appropriate action.

b. Tiering. Consideration should be given to tiering of environmental documentation required by this appendix. Generic statements may include actions with relevant similarities such as common timing, environmental effects, alternatives, methods of implementation, or subject matter.

c. Classified information. Environmental analyses that address classified proposals will be safeguarded in accordance with Department of Defense Directive 5200.1. The requirements of that instruction take precedence over any disclosure required by this appendix.

d. Incomplete information. Environmental analyses should indicate when relevant information is missing due to unavailability or scientific uncertainty.

e. Limitations. The requirements for preparation, content, and distribution of environmental reviews in the international context must remain flexible. Application of



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specific procedures must be determined on a case-by-case basis and may be modified where necessary to:

(1) Enable the component to act promptly. Considerations such as national security and foreign government involvement may require prompt action that must take precedence in the environmental review process;

(2) Avoid adverse impacts on relations between the United States and foreign governments and international organizations;

(3) Avoid infringement or the appearance of infringement on the sovereign responsibilities of another government. The collection of information and the preparation and distribution of environmental documentation for actions in which another nation is involved or with respect to the environment and resources of another nation, unless done with proper regard for the sovereign authority of that nation, may be viewed by that nation as an interference in its internal affairs and its prerogative to evaluate requirements with respect to the environment; and

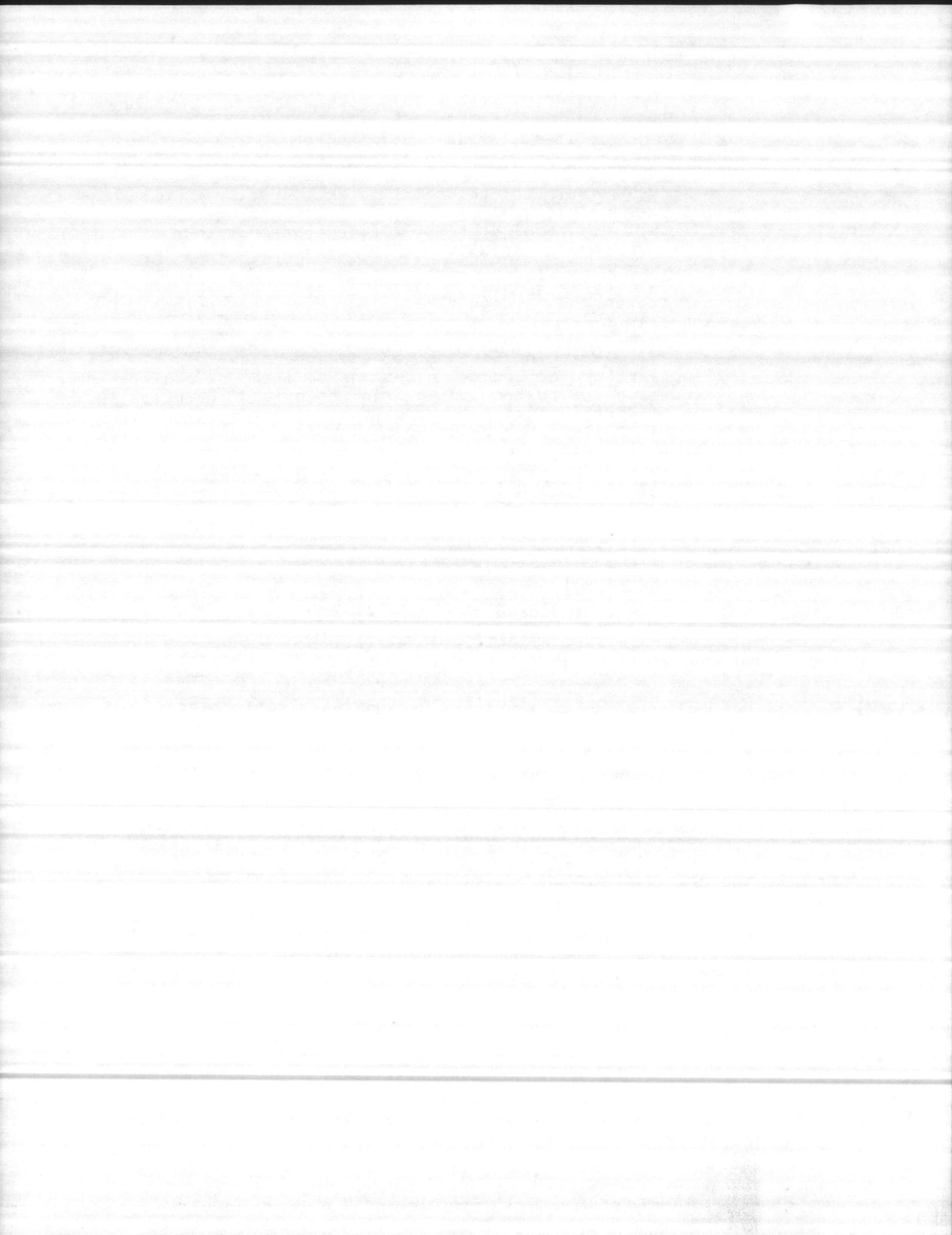
(4) Ensure consideration of:

(a) Requirements of governmental confidentiality. This refers to the need to protect sensitive foreign affairs information and information received from another government with the understanding that it will be protected from disclosure regardless of its classification;

(b) Availability of meaningful information. Information on the environment of foreign nations may be unavailable, incomplete, or not susceptible to meaningful evaluation, and this may reduce or change substantially the normal content of the environmental review;

(c) The extent of the participation of the Navy and its ability to affect the decision made. The utility of the environmental analysis and the need for an in-depth review diminishes as the role of the Navy and control over the decision lessens; and,

(d) International commercial, commercial confidentiality, competitive, and export promotion factors. This refers to the requirement to protect domestic and foreign trade secrets and confidential business information from disclosure.



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f. Combining documents. Environmental documents required by this appendix may be combined with other agency documents to reduce duplication. If an environmental statement for a particular action already exists (regardless of Federal agency preparation), no new statement is required by this appendix unless substantially changed circumstances exist from those considered in the earlier analysis.

6. Requirements for Environmental Considerations - Global Commons.

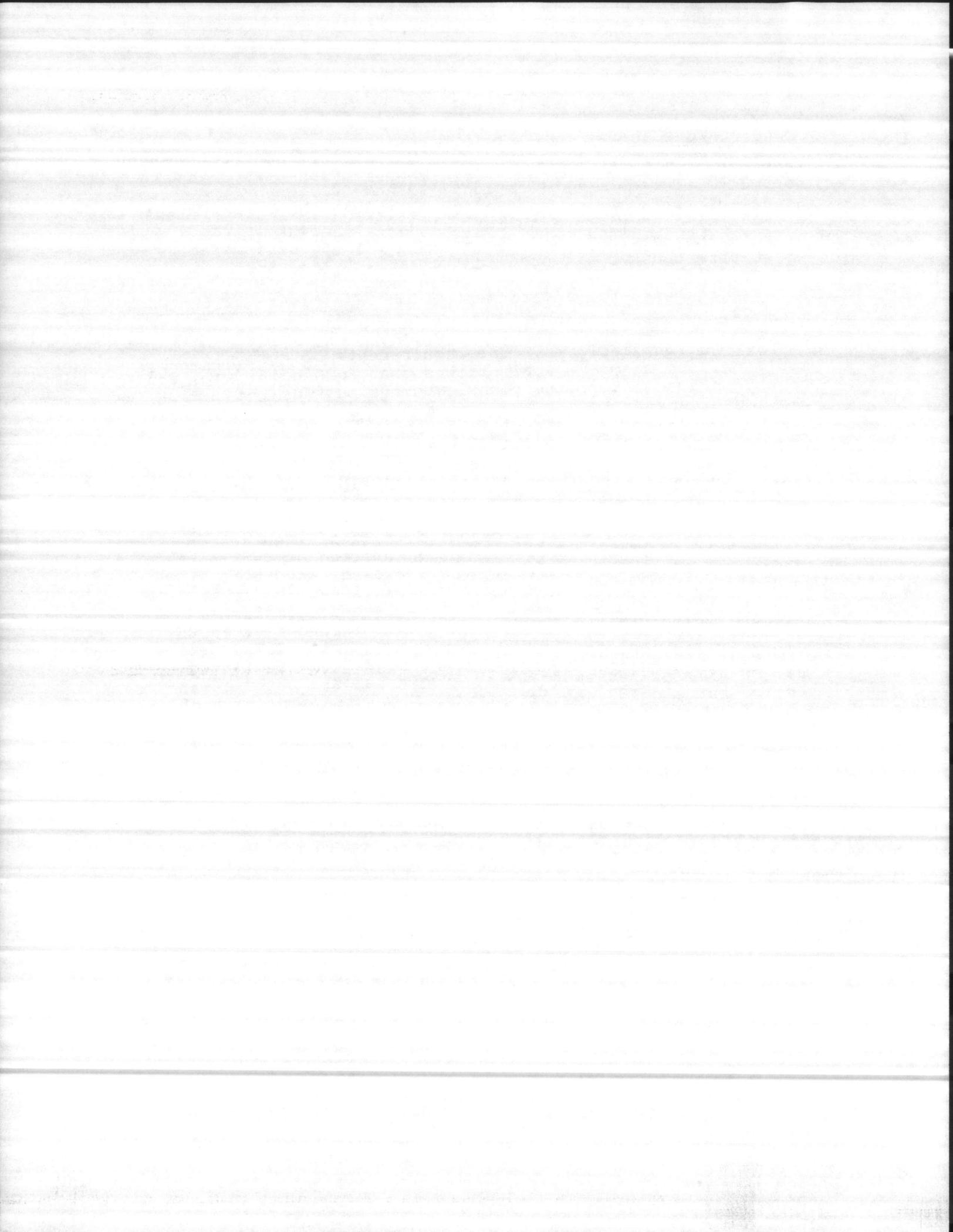
a. Actions included. The requirements of this section apply only to major Federal actions that do significant harm to the environment of the global commons outside the jurisdiction of any nation.

b. Environmental document requirements

(1) General. When an action is determined to be a major Federal action that significantly harms the environment of the global commons, an environmental statement (ES), as described below, will be prepared to enable the responsible decision making official to be informed of pertinent environmental considerations. The statement may be a specific statement for the particular action or a tiered generic statement covering an entire class of similar actions, whichever applicable. To determine whether an ES is required the action command may consult with CNO (Op-45) or prepare an environmental assessment (EA) and submit to CNO (Op-45) for review. The assessment should be brief and concise but should include sufficient information on which a determination can be made whether the proposed action is major and Federal, and whether it significantly harms the environment of the global commons. At a minimum, the assessment should include consideration of the need for the proposed action and the environmental effect of the proposed action. If no statement is required, the environmental assessment will be made available to the public in the United States upon request, but there is no requirement that it be distributed for public comment.

(2) Limitations on actions. Until the requirements of this appendix have been met with respect to actions involving the global commons, no action concerning the proposal may be taken that does significant harm to the environment or limits the choice of reasonable alternatives.

(3) Emergencies. Where emergency circumstances make it necessary to take an action that does significant harm to



the environment without meeting the requirements of this section, the Navy element concerned shall consult with the Chief of Naval Operations (Op-45). This includes actions that must be taken to promote the national defense or security and that cannot be delayed, and actions necessary for the protection of life or property. Consultation does not mean prior approval.

c. Environmental statements (ES's)

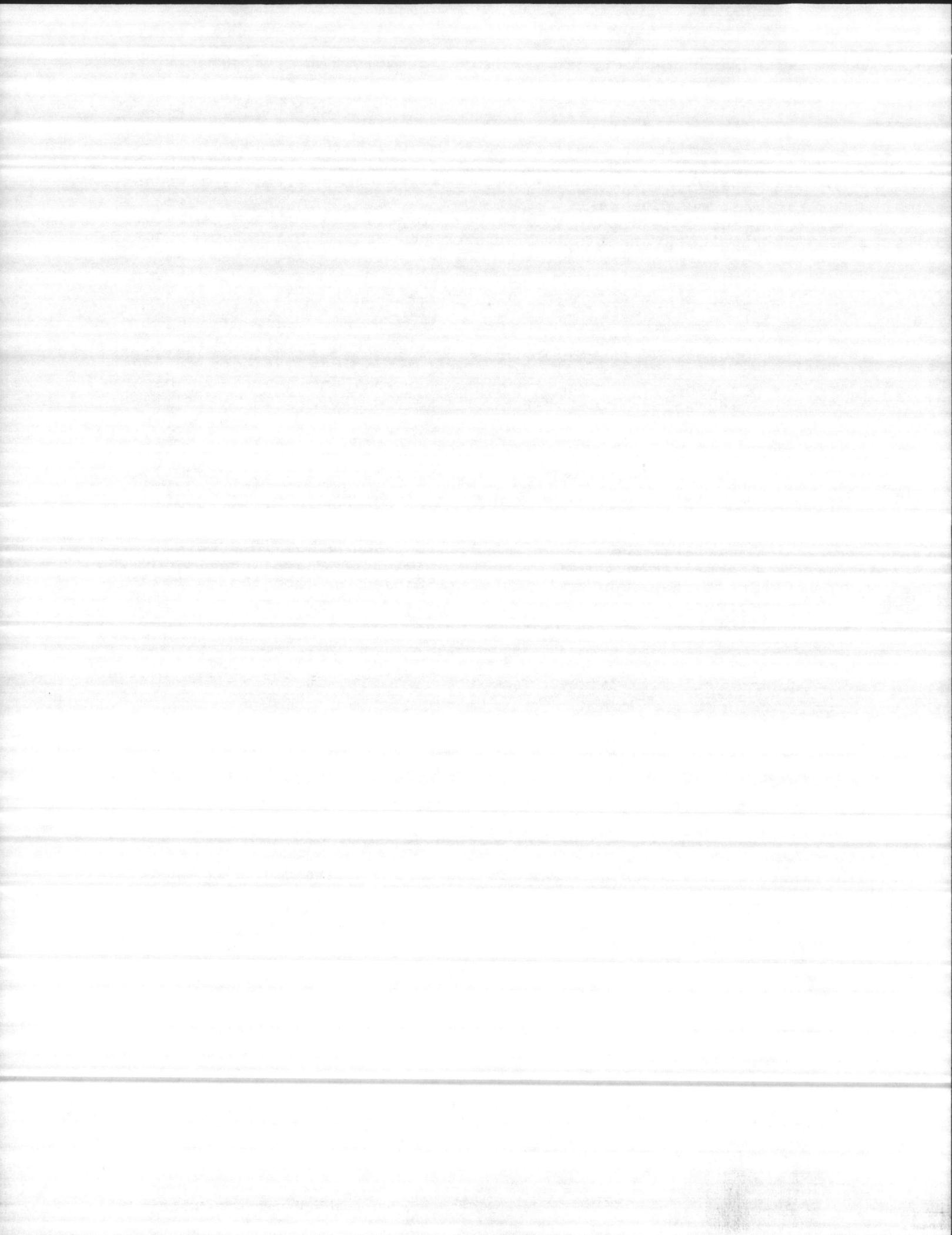
(1) General. Environmental statements will be concise and no longer than necessary to permit an informed consideration of the adverse environmental effects of the proposed action on the global commons and the reasonable alternatives.

(2) Draft statement. Environmental statements will be prepared in two stages and may be supplemented. The first, or draft statement, should be sufficiently complete to permit meaningful analysis and comments. The draft statement will be made available to the public, in the United States, for comment. The Department of State, the Council on Environmental Quality, and other interested Federal agencies will be informed of the availability of the draft statement and will be afforded an opportunity to comment.

(3) Final statement. Final statements will consider substantive comments received on the draft statement. The final statement will be made available to the public in the United States.

(4) Supplemental statement. Supplements to the draft or final statement should be used when substantial changes to the proposed action are made relative to the environment of the global commons or when significant new information is available. Supplemental statements will be circulated for comment as in subsection (2) above unless alternative procedures are approved by CNO (Op-45).

(5) Statement content. The statement will include: a section on consideration of the purpose of and need for the proposed action; a section on the environmental consequences of the proposed action and reasonable alternatives; a section that provides a succinct description of the environment of the global commons affected by the proposed action and reasonable alternatives; and a section that analyzes, in comparative form, the environmental effects on



the global commons of the proposed action and reasonable alternatives.

(6) Hearings. Public hearings are not mandatory, however, consideration should be given in appropriate cases to holding or sponsoring public hearings. Factors in this consideration include: foreign relations sensitivities; whether the hearings would be an infringement or create the appearance of infringement on the sovereign responsibilities of another government; requirements of domestic and foreign governmental confidentiality; requirements of national security; whether meaningful information could be obtained through hearings; time considerations; and requirements for commercial confidentiality. Such hearings may be held only with the approval of CNO (Op-45).

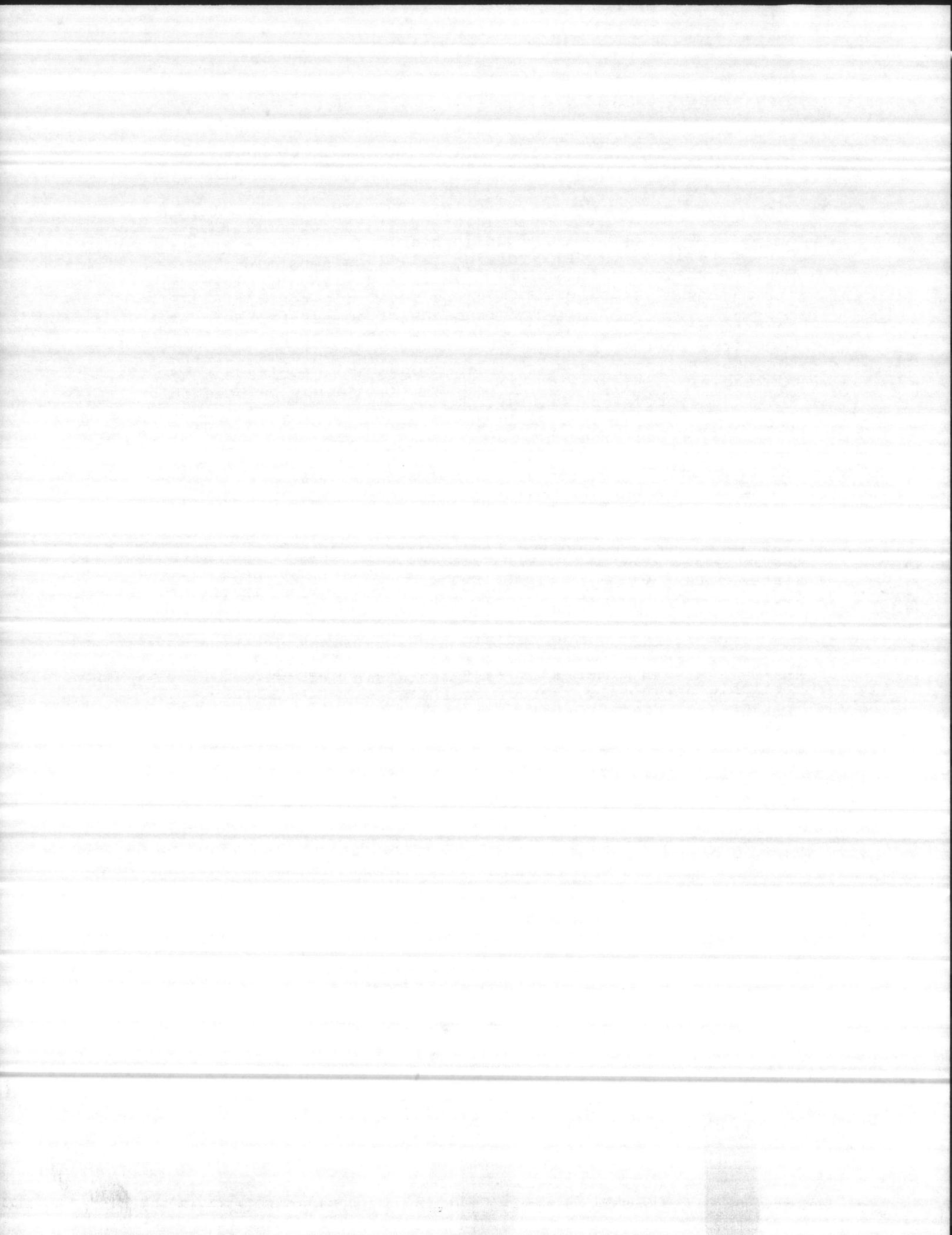
- (7) Decision. Relevant environmental documents developed in accordance with this appendix will accompany the proposal for action through the review process to enable officials responsible for authorizing or approving the proposed action to be informed and to take account of environmental considerations. In order to demonstrate that impacts on the environment have been considered, decision-makers shall sign and date a copy of the environmental statement indicating that it has been considered in the decisionmaking process.

(8) Timing. No decision on the proposed action to cause significant environmental harm may be made until a minimum 90 days after the draft statement has been made available and notice thereof published in the Federal Register, or 30 days after the final statement has been made available and notice thereof published in the Federal Register. The 90-day period and the 30-day period may run concurrently. Not less than 45 days may be allowed for public comment. If it appears that important adverse effects on national security or foreign policy may result from observation of these dates, CNO (Op-45) will endeavor to obtain waivers from these requirements from the Department of Defense.

7. Requirements for environmental considerations -- foreign nations and protected global resources.

a. Actions included

(1) The requirements of this section apply only to the following actions:



(a) Major Federal actions that significantly harm the environment of a foreign nation that is not involved in the action. The involvement of the foreign nation may be directly by participation with the United States in the action, or it may be in conjunction with another participating nation. The focus of this category is on the geographical location of the environmental harm and not on the location of the action.

(b) Major Federal actions that are determined to do significant harm to the environment of a foreign nation because they provide to that nation: (1) a product, or involve a physical project that produces a principal product, emission, or effluent, that is prohibited or strictly regulated by Federal law in the United States because its toxic effects on the environment create a serious public health risk; or (2) a physical project that is prohibited or strictly regulated in the United States by Federal law to protect the environment against radioactive substances. Included in the category of "prohibited or strictly regulated" are the following: asbestos, vinyl chloride, acrylonitrile, isocyanates, polychlorinated biphenyls, mercury, beryllium, arsenic, cadmium, and benzene.

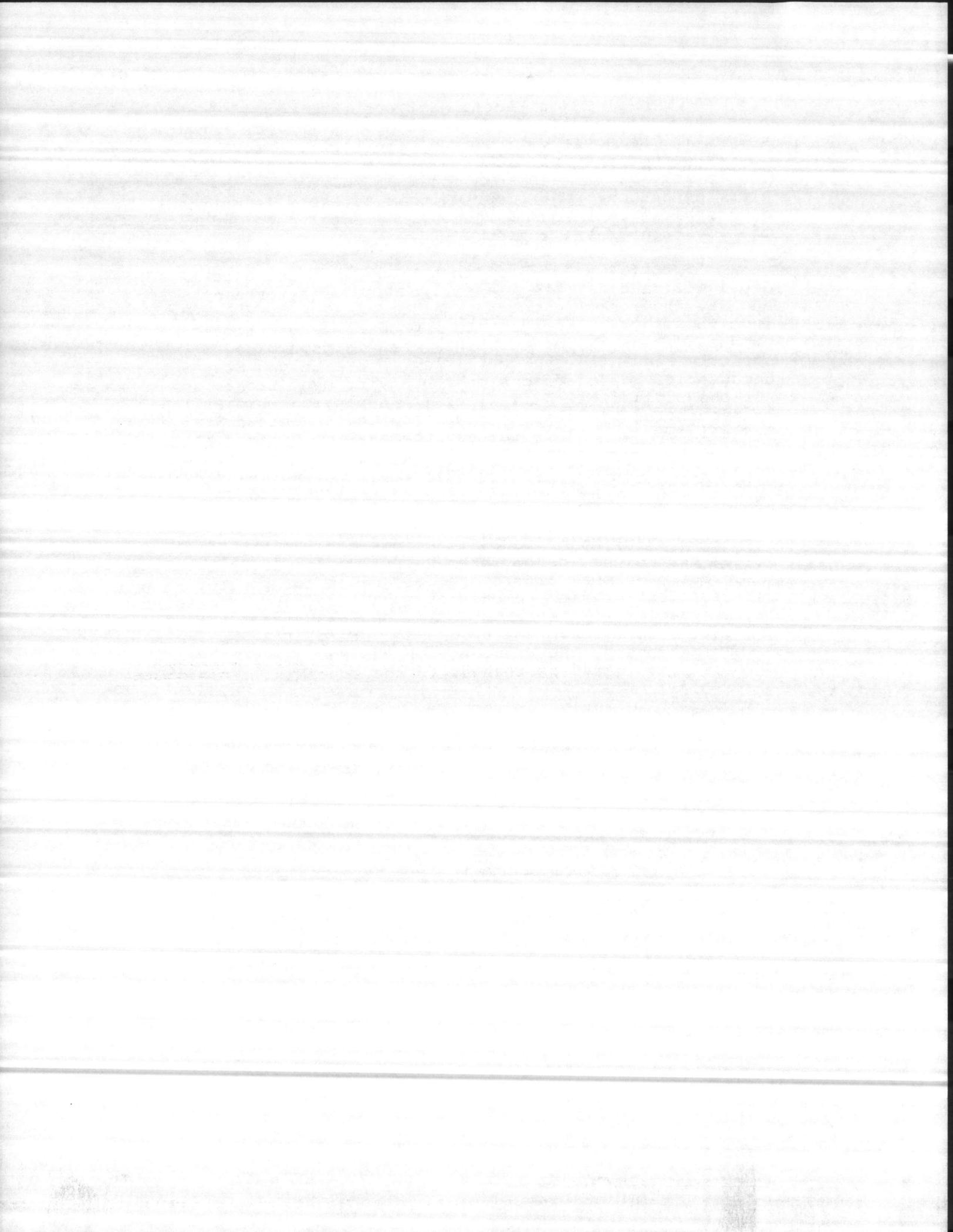
(c) Major Federal actions outside the United States that significantly harm natural or ecological resources of global importance designated for protection by the President or, in the case of such a resource protected by international agreement binding on the United States, designated for protection by the Secretary of State, such determinations by the President or the Secretary of State will be promulgated as changes to the appendix.

(2) No action is required under this section with respect to Federal actions that affect only the environment of a participating or otherwise involved foreign nation or do not involve providing products or physical projects producing principal products, emissions, or effluents that are prohibited or strictly regulated by Federal law in the United States, or resources of global importance that have been designated for protection.

b. Environmental Document Requirements

(1) General

(a) There are two types of environmental documents officials shall use in environmental considerations for actions covered by this section:



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1. Environmental studies--bilateral or multilateral environmental studies, relevant or related to the proposed action, by the United States and one or more foreign nations or by an international body or organization in which the United States is a member or participant; and

2. Environmental reviews--concise reviews of the environmental issues involved that are prepared unilaterally by the United States.

(b) If an environmental document already exists for a particular action, regardless of what Federal agency prepared it, no new document is required by this section.

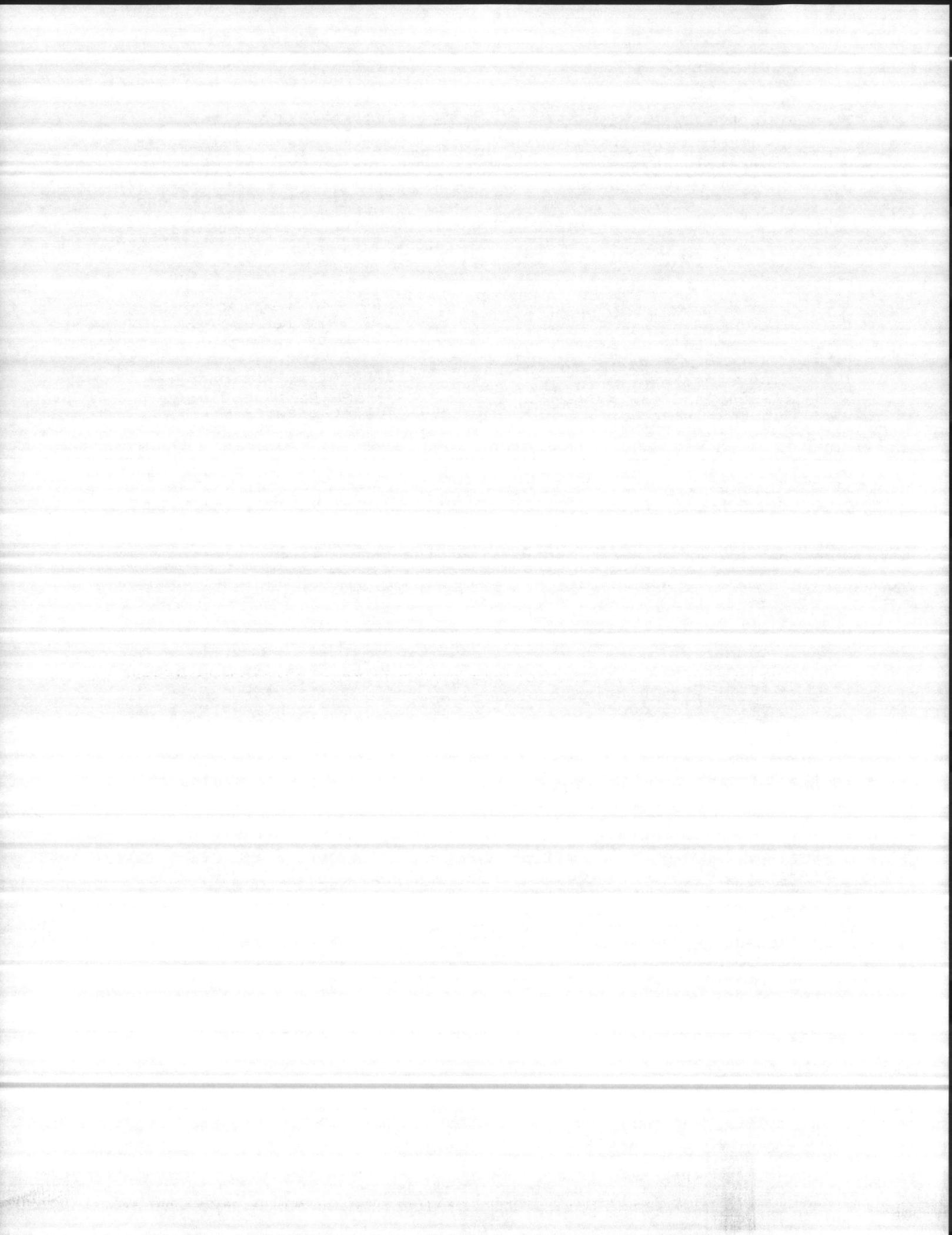
(2) Exemptions. There are general exemptions from the requirements of this section provided by Executive Order 12114, and the Secretary of Defense has the authority to approve additional exemptions.

(a) General Exemptions. The following actions are exempt from the procedural and other requirements of this section under general exemptions established for all agencies by Executive Order 12114:

1. Actions that the CNO (Op-45) determines do not do significant harm to the environment outside the United States or to a designated resource of global importance.

2. Actions taken by the President. These include: signing bills into law; signing treaties and other international agreements; the promulgation of Executive Orders; Presidential proclamations; and the issuance of Presidential decisions, instructions, and memoranda. This includes actions taken within the Navy to prepare or assist in preparing recommendations, advice, or information for the President in connection with one of these actions by the President. It does not include actions taken within the Navy to implement or carry out these instruments and issuances after they are promulgated by the President.

3. Actions taken by or pursuant to the direction of the President or a cabinet officer in the course of armed conflict. The term "armed conflict" refers to: hostilities for which Congress has declared war or enacted a specific authorization for the use of armed forces; hostilities or situations for which a report is prescribed by section 4(a)(1) of the War Powers Resolution,



50 U.S.C.A. section 1543(a)(1) (Supp, 1978); and other actions by the armed forces that involve defensive use or introduction of weapons in situations where hostilities occur or are expected. This exemption applies as long as the armed conflict continues.

4. Actions taken by or pursuant to the direction of the President or a cabinet officer when the national security or national interest is involved. The determination that the national security or national interest is involved in actions by the Navy must be made in writing by the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics).

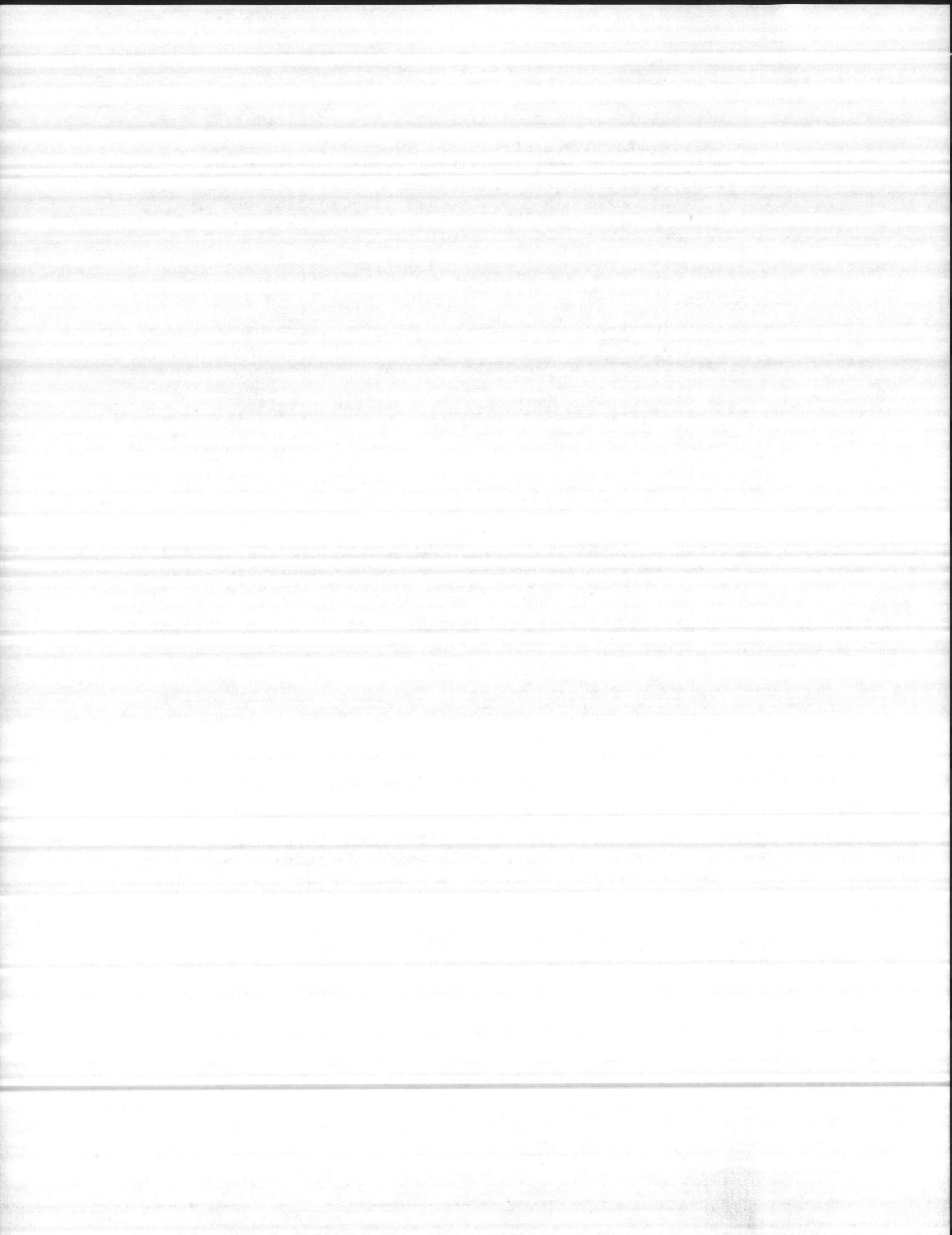
5. The activities of the intelligence components utilized by the Secretary of Defense under Executive Order 12036, 43 Fed. Reg. 3674 (1978). These components include the offices for the collection of specialized intelligence through reconnaissance programs, and the Office of Naval Intelligence.

6. The decisions and actions of the responsible offices within the Navy with respect to arms transfers to foreign nations. The term "arms transfers" includes the grant, loan, lease, exchange, or sale of defense articles or defense services to foreign governments or international organizations, and the extension or guarantee of credit in connection with these transactions.

7. Votes and other actions in international conferences and organizations. This includes all decisions and actions of the United States with respect to representation of its interests at international organizations, and at multilateral conferences, negotiations, and meetings.

8. Disaster and emergency relief actions.

9. Actions involving export licenses, export permits, or export approvals, other than those relating to nuclear activities. This includes: advice provided by the Navy to the Department of State with respect to the issuance of munitions export licenses under section 38 of the Arms Export Control Act, 22 U.S.C. section 2778 (1976); advice provided by the Navy to the Department of Commerce with respect to granting of export licenses under the Export Administration Act of 1969, 50 U.S.C. App. sections 2401-2413 (1970 & Supp. V 1975); and direct exports by the Navy of defense articles and services to foreign governments and



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international organizations that are exempt from munitions export licenses under section 38 of the Arms Export Control Act, 22 U.S.C. section 2778 (1976). The term "export approvals" does not mean or include direct loans to finance exports.

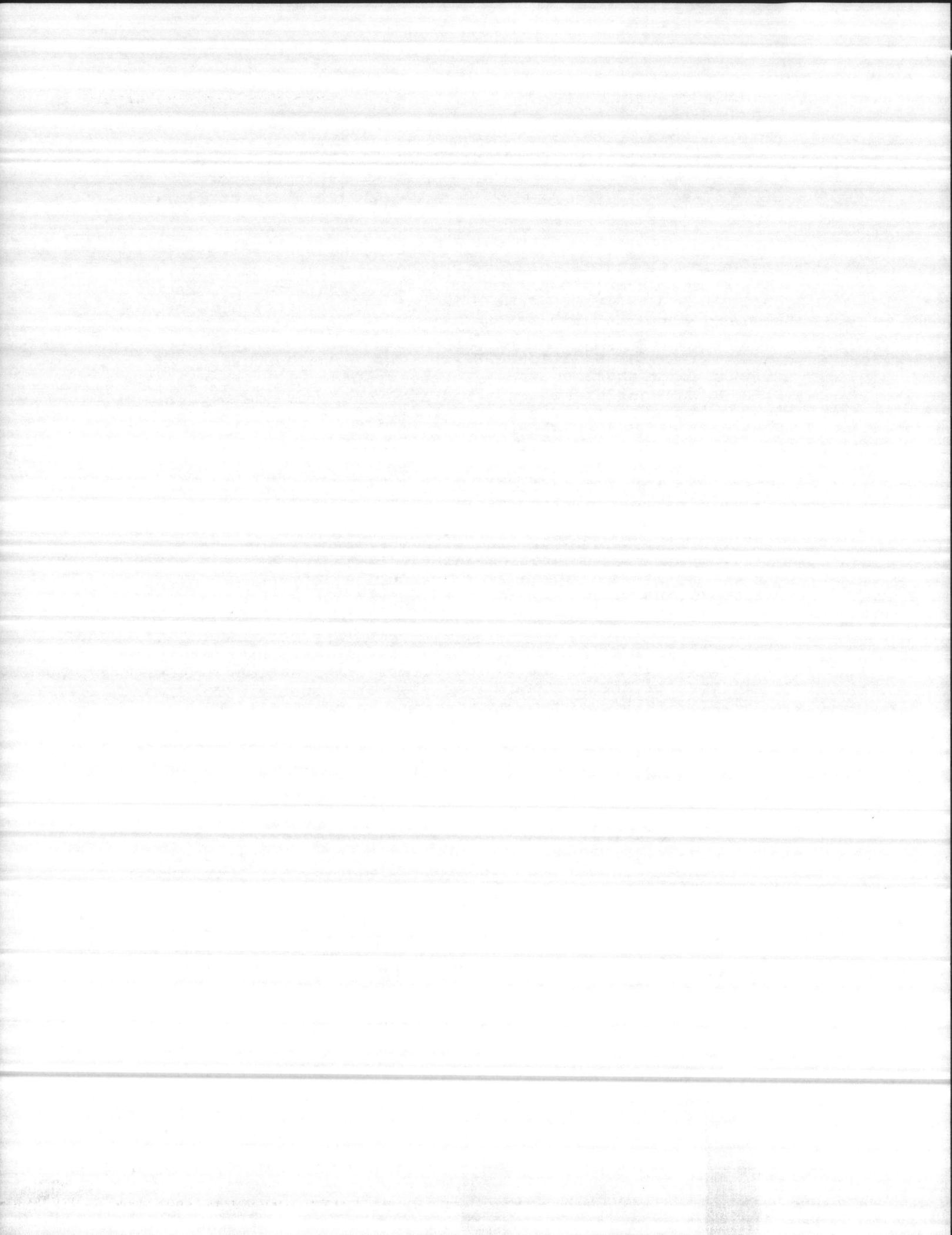
10. Actions relating to nuclear activities and nuclear material, except actions providing to a foreign nation a nuclear production or utilization facility, as defined in the Atomic Energy Act of 1954, as amended, or a nuclear waste management facility.

(b) Additional Exemptions. The Department of Defense is authorized under Executive Order 12114 to establish additional exemptions that apply only to the Department's operations. There are two types of additional exemptions: case-by-case and class.

1. Case-by-Case Exemptions. Exemptions other than those specified above may be required because emergencies, national security considerations, exceptional foreign policy requirements, or other special circumstances preclude or are inconsistent with the preparation of environmental documentation and the taking of other actions prescribed by this appendix. The following procedures apply for approving these exemptions:

a Emergencies. This category includes actions that must be taken to promote the national defense or security and that cannot be delayed, and actions necessary for the protection of life or property. The CNO (Op-45) is authorized to approve emergency exemptions on a case-by-case basis. The Department of Defense is required to consult as soon as feasible with the Department of State and the Council on Environmental Quality with respect to emergency exemptions. The requirement to consult as soon as feasible is not a requirement of prior consultation. A report of the emergency action will be made by CNO (Op-45) via DUSN to the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics), who, with the Assistant Secretary of Defense (International Security Affairs), shall undertake the necessary consultations.

b Other Circumstances. National security considerations, exceptional foreign policy requirements, and other special circumstances not identified in paragraph 7a(2)(a) above, may preclude or be inconsistent with the preparation of environmental documentation. In these



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circumstances, CNO (Op-45) is authorized to exempt a particular action from the environmental documentation requirements of this appendix after the prior approval of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) has been obtained.

2. Class Exemptions. Circumstances may exist where a class exemption for a group of related actions is more appropriate than a specific exemption. Requests for class exemptions, with supporting documentation are solicited from major commands. Requests should be submitted to CNO (Op-45) for appropriate action. Notice of the establishment of a class exemption will be issued as a change to this appendix.

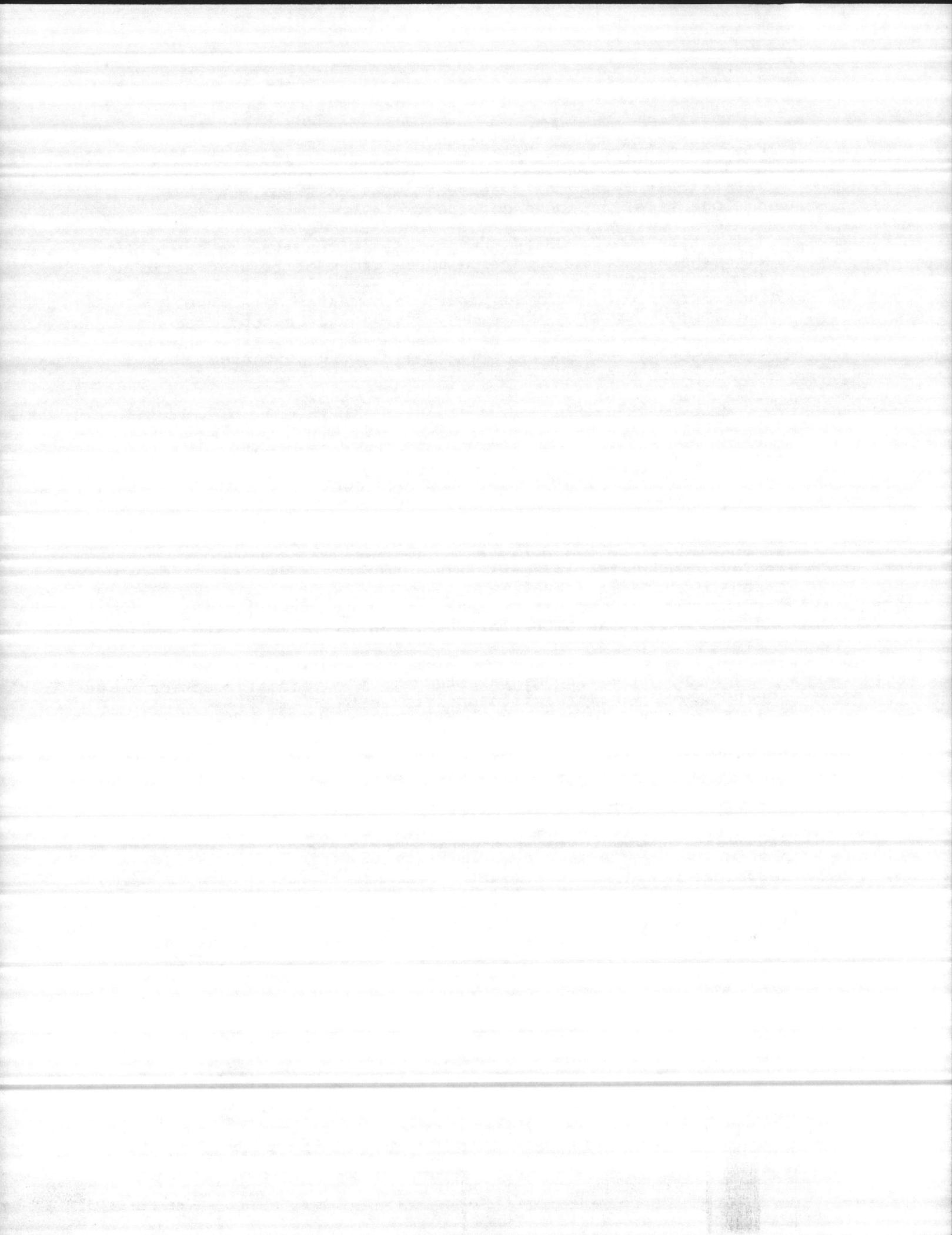
8. Environmental Studies

a. General. Environmental studies are one of two alternative types of documents to be used for actions described by paragraph B. of this section.

(1) An environmental study is an analysis of the likely environmental consequences of the action that is to be considered by the decisionmaking process. It includes a review of the affected environment, significant actions taken to avoid environmental harm or otherwise to better the environment, and significant environmental considerations and actions by the other participating nations, bodies, or organizations.

(2) An environmental study is a cooperative action and not a unilateral action undertaken by the United States. It may be bilateral or multilateral, and it is prepared by the United States in conjunction with one or more foreign nations, or by an international body or organization in which the United States is a member or participant. The environmental study, because it is prepared as a cooperative undertaking, may be best suited for use with respect to actions that provide strictly regulated or prohibited products or projects to a foreign nation (B.1.b.) and actions that affect a protected global resource (B.1.c.).

b. Whether to Prepare an Environmental Study. The judgment whether the action is one that would do significant harm to one of the environments covered by this appendix normally will be made in consultation with concerned foreign governments or organizations. If a negative decision is



made, the file will be documented with a record of that decision and the decisionmakers who participated. If a decision is made to prepare a study then, except as provided by this enclosure, no action concerning the proposal may be taken that would do significant harm to the environment until the study has been completed and the results considered.

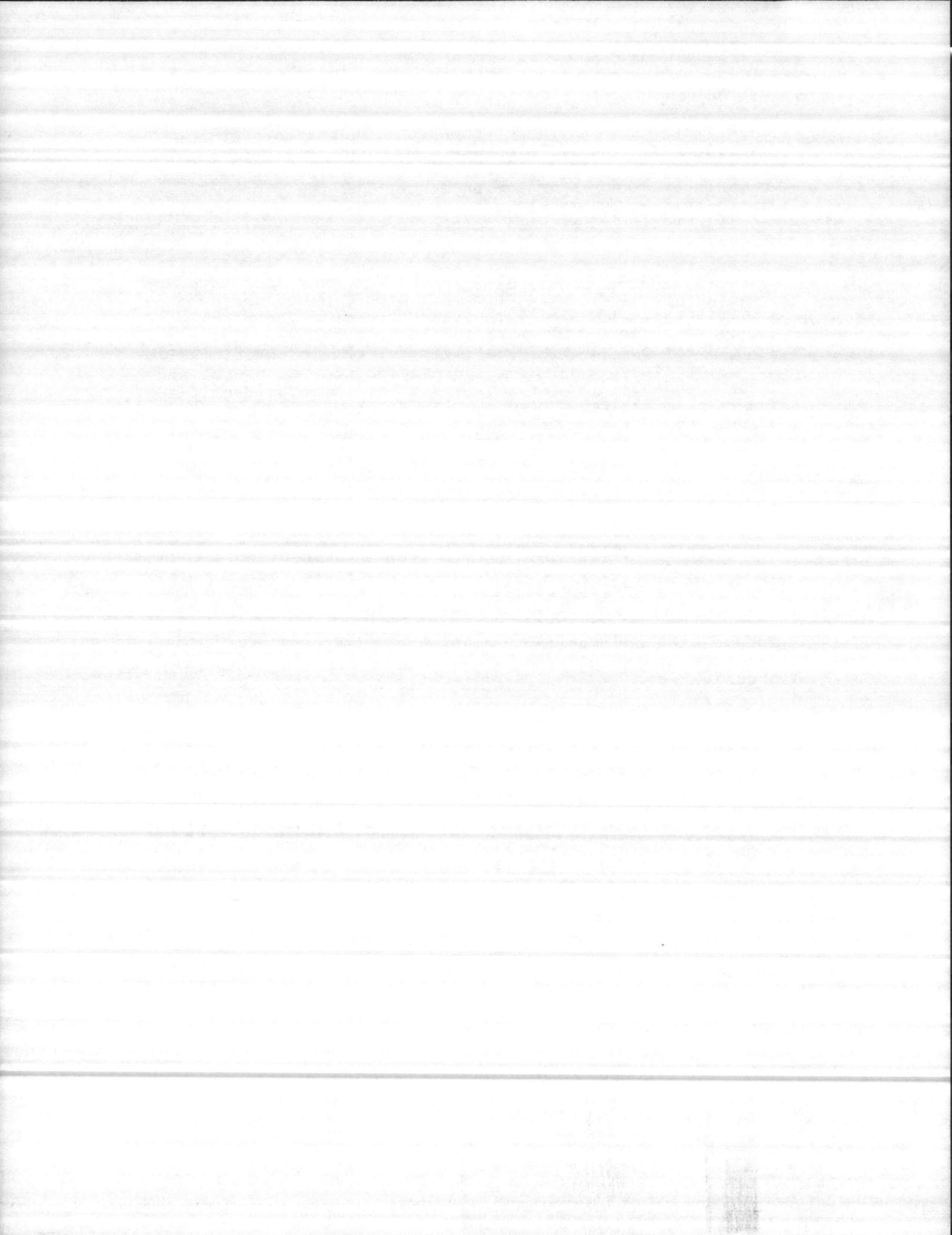
c. Content of the Study. The document is a study of the environmental aspects of the proposed action to be considered in the decisionmaking process. The precise content of each study must be flexible because of such considerations as the sensitivity of obtaining information from foreign governments, the availability of useful and understandable information, and other factors identified under "Limitations," (subsection 5f above). The study should however, include consideration of the following:

- (1) A general review of the affected environment;
- (2) The predicted effect of the action on the environment;
- (3) Significant known actions taken by governmental entities with respect to the proposed action to protect or improve the environment; and
- (4) If no actions are being taken to protect or enhance the environment, whether the decision not to do so was made by the affected foreign government or international organization.

9. Environmental Reviews

a. General. Environmental reviews are the second of the two alternative types of documents to be used for actions covered by paragraph b of this section.

(1) An environmental review is a survey of the important environmental issues involved. It includes identification of these issues, and a review of what if any consideration has been or can be given to the environmental impact under enclosure (1) of this instruction. There is no foreign government or international organization participation in its preparation, and the content therefore may be circumscribed because of the availability of information and because of foreign relations sensitivities. Other factors affecting the content are identified under "Limitations,"



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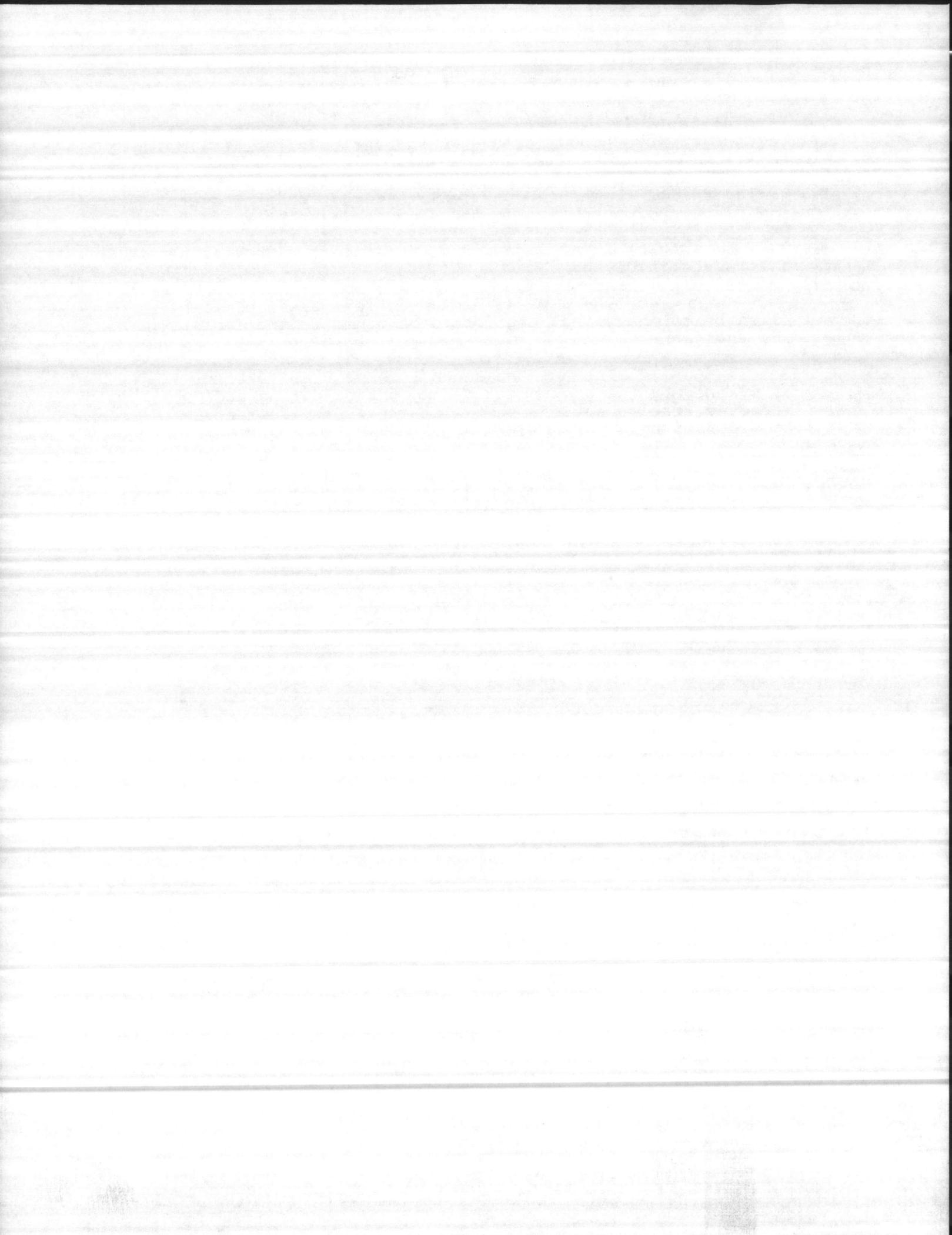
(subsection 5.f., above). To the extent reasonably practical the review should include consideration of the following:

(a) A statement of the action to be taken including its timetable, physical features, general operating plan, and other similar broad-gauge descriptive factors;

(b) Identification of the important environmental issues involved;

(c) The aspects of the actions taken or to be taken by the Navy that ameliorate or minimize the impact on the environment; and

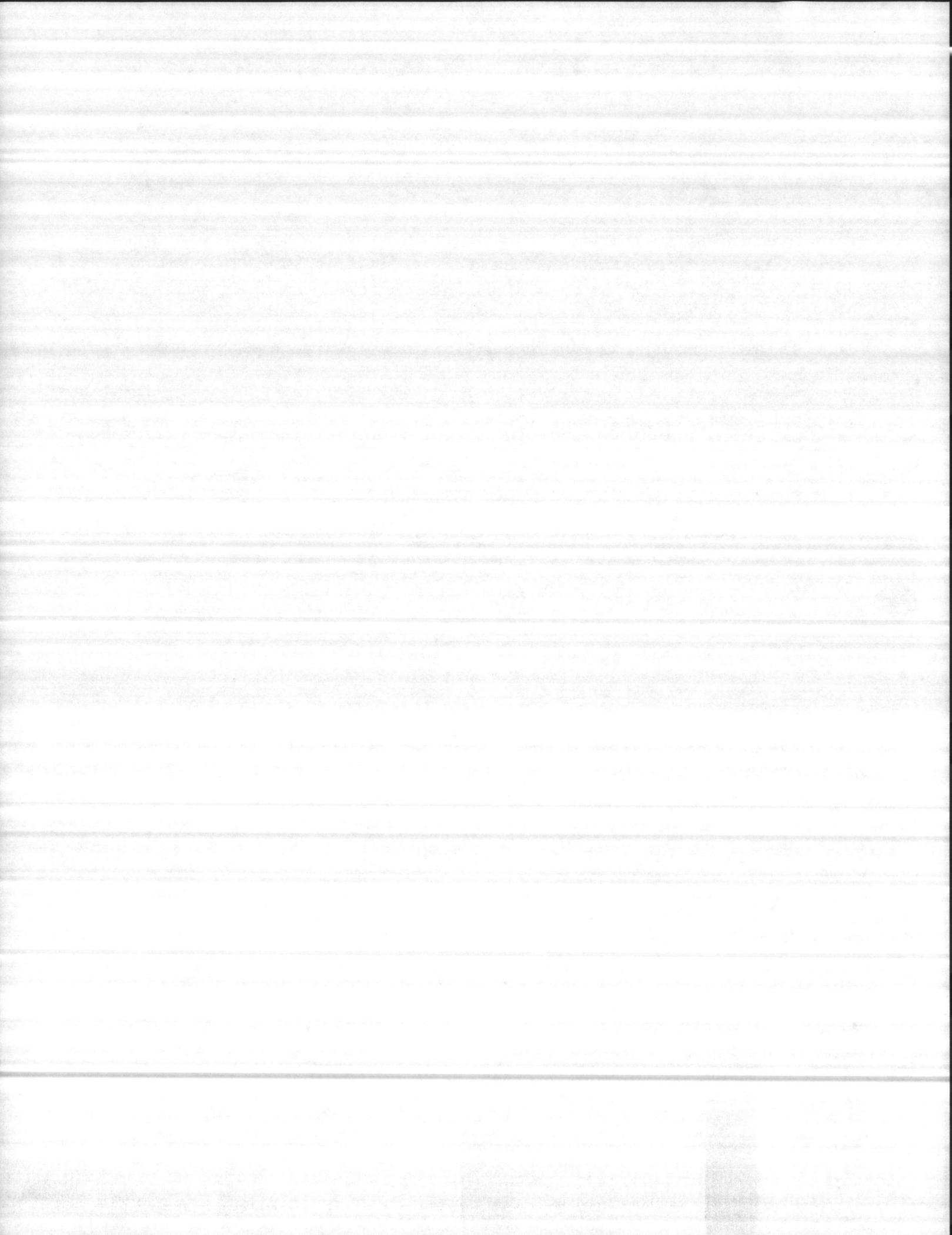
(d) The actions known to have been taken or to be planned by the government of any participating and affected foreign nations that will affect environmental considerations.



FORMAT FOR ALL ENVIRONMENTAL ASSESSMENTS AND STATEMENTS

- A. Cover Sheet
- B. Summary
- C. Purpose and Need for Proposed Action
- D. Alternatives, Including No Action, With Comparison in Matrix Form
- E. Existing Environment
- F. Environmental Consequences of Proposed Action and Alternatives, including Resources, Energy, Productivity, Land-Use Planning Conflicts, Mitigation of Impacts, Unavoidable Impacts, etc., Both Direct and Indirect
- G. List of Preparers
- H. Appendices

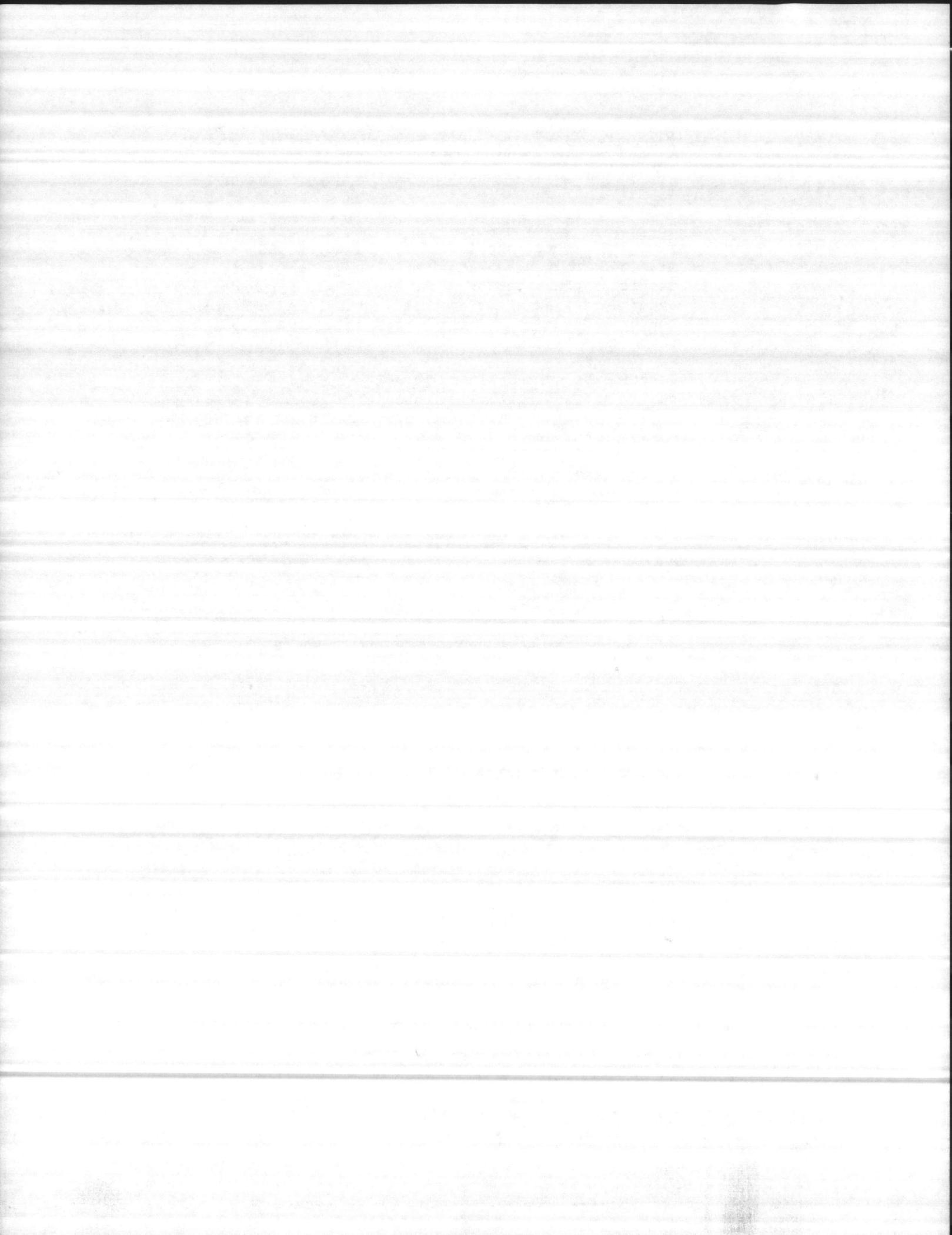
REF: OPNAVINST 6240.3E, CH-1, 5 Nov 79, Section 4402f.(3) (pages 4-25)



The following is a list of items which, if appropriate, should be included in the Environmental Statement:

1. General

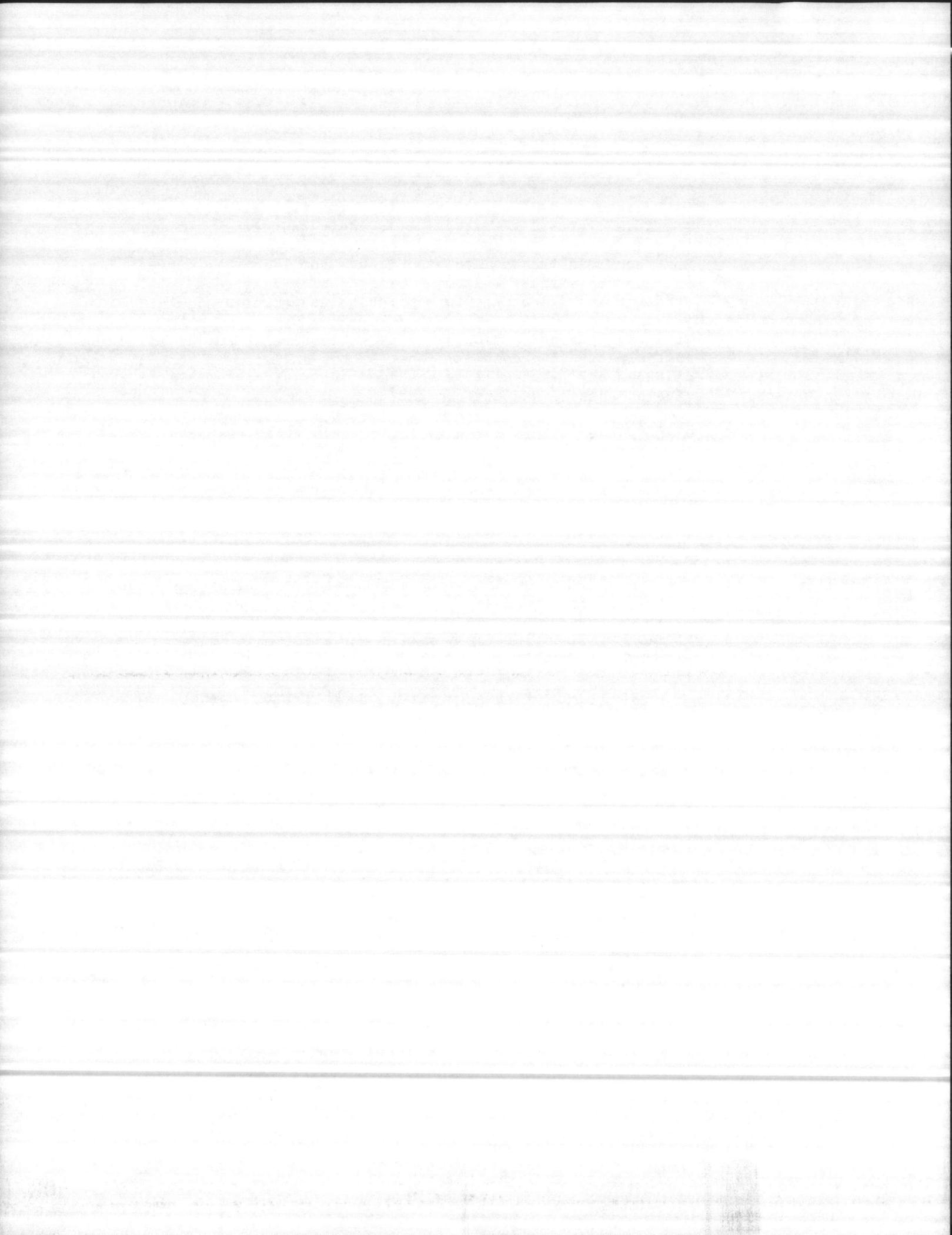
- (1) To give a better description of the area in question, the Environmental Statement should include pictures and/or diagrams of the area before changes occur, any changes which are expected as a result of construction, or temporary or permanent roads, that will occur during or after proposed action, and pictorial and/or architectural description of the area after the proposed action is complete.
- (2) Describe ecosystem(s) in area of proposed impact. If the ecosystem(s) has a limited area, show this on maps (or charts), including that portion which will bear the full force of the impact.
- (3) Ascertain if the ecosystem is a limited national resource -- as in the case of tidal wetlands -- or one generally impacted country-wide -- as water resources. Describe what precautions are being taken to insure protection of similar areas within a reasonable distance of the impacted area. State whether an equivalent ecosystem area is being set aside to be managed for the public good (in perpetuity).
- (4) In regard to dispersion (distribution) of contaminants -- identify vectors of transport (as atmosphere, hydrosphere, biota), quantities dispersed by each vector, and to where?
- (5) What are the "half-lives" of the contaminants?
- (6) What about possible concentration buildups in biota?
- (7) What is the extent of coordination with other agencies? Were their activities those of consultation or review?
- (8) How does this proposal fit into regional or area-wide plans or planning activities?
- (9) Is the environmental statement to be the only Environmental Protection Agency comment or will there be additional opportunity in more detailed studies, through permit applications, or through requests for technical input? Will draft be redone or will statements be attached?
- (10) Reference or attach any water, air, radiation, solid waste, or pesticide studies in connection with this or similar proposals.
- (11) State if proposed action meets state and local standards for environmental quality aspects.



- (12) Will the proposed action come under a public hearing?
- (13) Have local or national conservation groups been consulted regarding this proposal? What has been their reaction?
- (14) What controls are available to insure compliance by subcontractors? Include any changes which may arise during construction. Are there contract specifications for pollution abatement equipment?
- (15) Will the proposed action be an isolated development or is it the initial step in a complex? What is the anticipated schedule for development? What will be the cumulative effect of all related developments on the environment?
- (16) What is the potential for geologic activity in the area? Is the area in question near fault zones?
- (17) Is there a potential for accidental spills or other single instance environmental impact?

2. Water Quality

- (1) What is existing quality of affected streams? What water quality parameters are expected to change?
- (2) Is there a potential for a change in water temperature as a result of proposed activity?
- (3) Is there an opportunity for water quality enhancement?
- (4) Specify quantities of water to be removed and from what part of the water cycle. Where will it be returned in the water cycle, in what condition, and at what rate?
- (5) Does the proposed action affect or threaten a public drinking water supply?
- (6) If water supply is involved, does the source conform to Public Health Service Drinking Water Standards?
- (7) Does the proposed action provide a health threat through adding toxic or hazardous materials to water which may be used for recreation?
- (8) Is there an effluent involved? What type of treatment is anticipated?
- (9) Have State and local water pollution control and public health agencies been involved in planning to date?



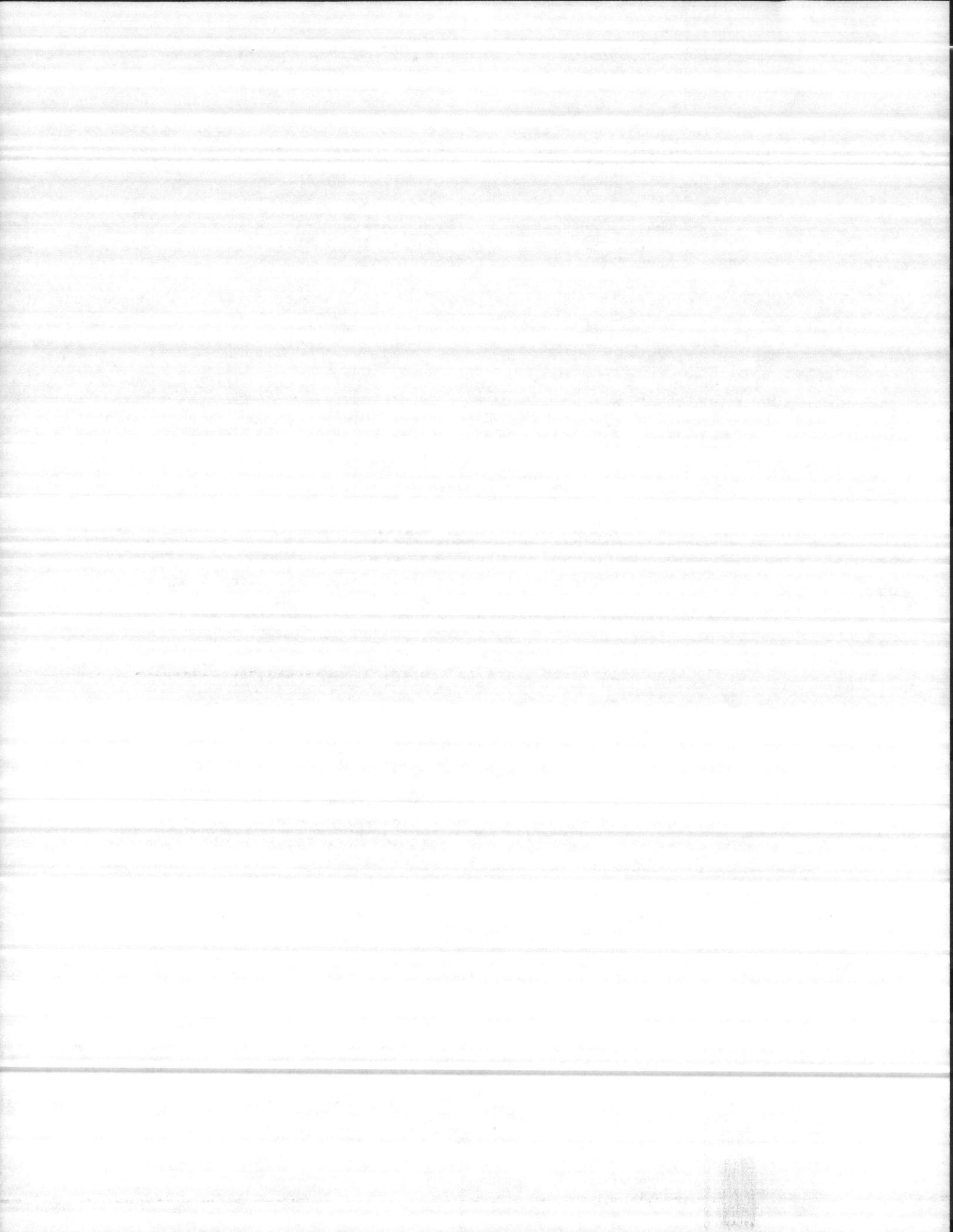
- (10) Is there a potential for erosion either during construction or throughout life of the project? Will this be controlled? If so, how?
- (11) If this involves an estuarine area, river, lake or oceanic area, what will be the dispersion pattern of the effluent? What will be the residence time? What is the natural dissolved oxygen levels during periods of stratification?
- (12) What biota is present now, and will the composition and frequency be expected to change?

3. Solid Waste

- (1) What are the quantities and qualities and types of solid waste which will require disposal either from construction or operation. What is forecast for future loads? What are the biodegradation times?
- (2) Solid waste management plans must comply with State and local solid waste management plans when available. Has contact been made with State and local waste control agencies? Which ones? Have they been asked to comment?
- (3) What is the potential for utilizing or recycling solid wastes?
- (4) Will solid waste disposal involve other quality areas such as air or water?
- (5) How will solid waste be stored, transported, processed, and disposed?
- (6) Has Section 211 of PL-91-512 relating to guidelines for solid waste management been complied with?

4. Air Quality

- (1) What contact has been made with State or regional air pollution control agencies? What agencies have been consulted and what consultation and review has occurred?
- (2) Will actions be in conformance with applicable State or local air pollution control rules of regulations?
- (3) What types and quantities of pollutants will be emitted?
- (4) How will proposed actions affect ambient air quality levels?
- (5) Will proposed actions result in emission of a hazardous pollutant, as defined in the Clean Air Act, Section 112, and if so, what special precautions are being taken to prevent injury to life?



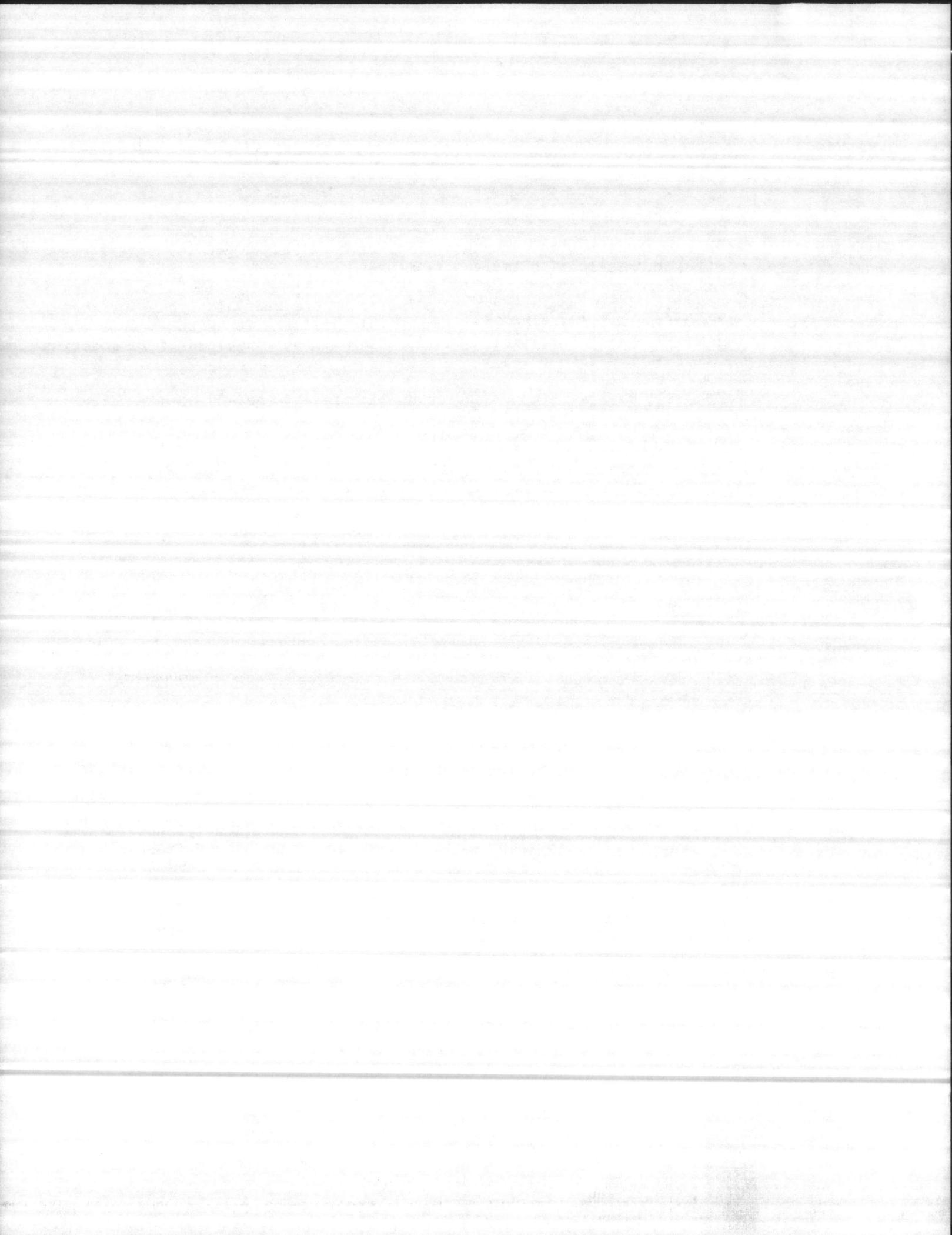
- (6) Have performance standards for new installations been reviewed?
- (7) How will the demography, topography, and meteorology of the site location affect pollution emissions?
- (8) Is there a preplanned abatement strategy developed to curtail the emissions in emergency situations?

5. Radiation (The Atomic Energy Commission has issued guidelines for the submission of radiation materials. This guidance is quite extensive in the environmental radiation field and should be consulted if radioactive materials are to be used.)

- (1) Will the facility or action be licensed by the AEC or an operation not requiring an AEC license?
- (2) Will the operation include an atomic explosion?
- (3) What will be the nature, concentration and estimated total quantity of radioactive material discharged to the environment? What will be the environmental effects of such discharges?
- (4) Where and how will wastes be disposed of?
- (5) Has the State (or States) been involved in the planning?
- (6) Has or will a Safety Analysis Report be prepared?
- (7) What is the nature of the monitoring program for radioactive material?

6. Pesticides

- (1) What target pests are to be controlled? Indicate crop or site to be treated, e.g., farm crops, woodland, marsh, water, lawns or shrubbery, building premises, etc. We should know acreage to be treated, amount to be used, type of formulation (granular dust, spray, bait), percentage of active ingredient(s) and frequency of application.
- (2) What are the life systems that will be impacted by the use of pesticides? What is the areal extent of such impacts?
- (3) Have Federal agencies who participate and cooperate with the Federal Working Group on Pesticides programs been reviewed and cleared by the F.I.F.R.A.?
- (4) Has the State departments of Agriculture and State Boards of Health who may also have registration authority been contacted? Has the

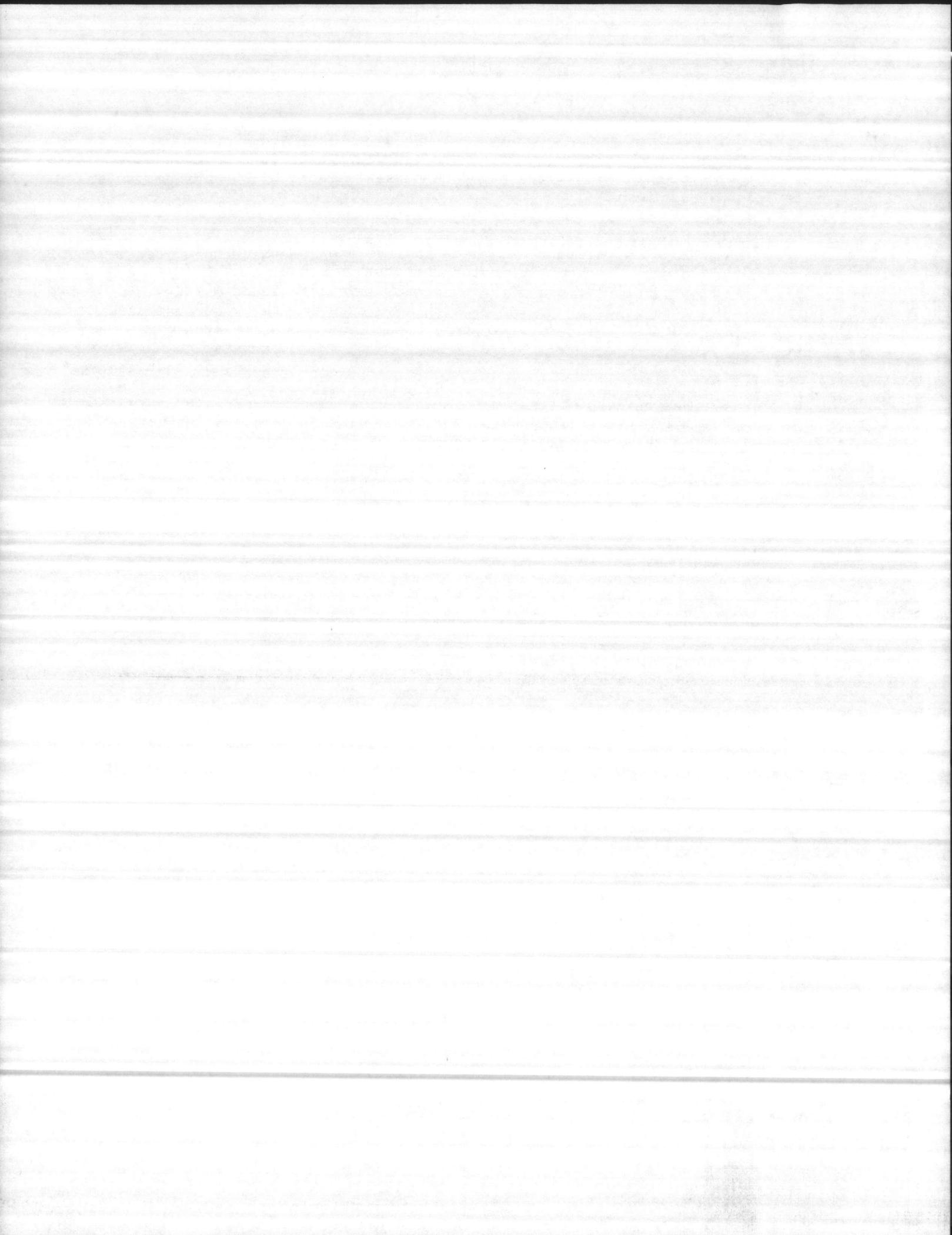


use of fish or aquatic weed control agents in public waters been cleared with the State Conservation or Fish and Game department?

- (5) Will there be use of persistent, non-biodegradable pesticides? These persistent materials include the so-called "hard pesticides" -- the chlorinated hydrocarbon or organo-chlorine compounds. Are use of heavy metal compounds (lead, mercury, cadmium), arsenical, or products which have experimentally demonstrated carcinogenic or teratogenic effects been contemplated?
- (6) Have alternatives been explored for other methods of pest control?
- (7) Has buildup of residues in the soil, runoff from rain or irrigation, drift from aerial application, and biological magnification in the food chain been considered?
- (8) What controls are available to insure proper use of pesticides?
- (9) Is there legal responsibility provisions in case accidents or adverse effects occur?

7. Toxic Materials

- (1) Will toxic materials be used or generated? How will they be disposed?
- (2) Has the toxic material been discussed with State and local pollution and health authorities?
- (3) Have alternatives or controls been explored for use of other materials or controls?
- (4) Are there contingency plans for action to control the toxic material if it develops or gets out of control?



ENVIRONMENTAL IMPACT MATRIX

FACTORS TO CONSIDER FOR PROBABLE IMPACT

REF: OPNAVINST 6240.3E, APPENDIX B, PARA B-5)

EXISTING CHARACTERISTICS OF ACTION SITE

(REF: OPNAVINST 6240.3E APPENDIX B, PARA B-4)

	TRANSPORTATION OF HAZARDOUS MATERIALS	RESOURCES DELETION	EMISSIONS LIQUID, SOLID, NOISE	PESTICIDES	RADIATION	WATER AND LAND USE	OTHER
DEMOGRAPHIC FACTORS	●	●	●	●		●	●
GOVERNMENTAL ORGANIZATIONS	●			●		●	○
CULTURAL FACTORS	●	○	●	●	●	○	●
PHYSICAL CHARACTERISTICS	●	○	○	●	●	●	●
LAND USE	○	●	○	●	○	○	●
WATER USE	●	○	○	●	●	●	●
AREA BIOSYSTEMS	○	○	●	●		●	●
OTHER	●	●	●	●	●	●	●

IMPACTS: PRIMARY ● SECONDARY ○

