

## National Science Foundation

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made, or if appropriate, when the agency makes its recommendation for action to Congress. (See 40 CFR 1505.2.)

### PART 641—ENVIRONMENTAL ASSESSMENT PROCEDURES FOR PROPOSED NATIONAL SCIENCE FOUNDATION ACTIONS IN ANTARCTICA

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AUTHORITY: E.O. 12114, 44 FR 1957, 3 CFR 1979 Comp., p. 356.

SOURCE: 57 FR 40339, Sept. 3, 1992, unless otherwise noted.

#### § 641.10 Purpose.

These procedures are designed to elicit and evaluate information that will inform the National Science Foundation (NSF) of the potential environmental consequences of proposed U.S. Antarctic Program (USAP) actions, so that relevant environmental considerations are taken into account by decisionmakers before reaching final decisions on whether or how to proceed with proposed actions. These procedures are consistent with and implement the requirements of:

- (a) Executive Order 12114 as it relates to NSF's Antarctic activities, and
- (b) the environmental assessment provisions of the Protocol on Environmental Protection to the Antarctic Treaty.

#### § 641.11 Policy.

It is the policy of NSF to use all practicable means, consistent with its authority, to ensure that potential environmental effects of actions under-

taken by NSF in Antarctica, either independently or in cooperation with another country, are appropriately identified and considered during the decisionmaking process, and that appropriate environmental safeguards which would limit, mitigate or prevent adverse impacts on the Antarctic environment are identified.

#### § 641.12 Applicability.

The requirements set forth in this part apply to all proposed projects, programs and actions authorized or approved by, or subject to the control and responsibility of NSF that may have an impact on the Antarctic environment.

#### § 641.13 Right of action

The procedures set forth in this part establish internal procedures to be followed by NSF in considering the potential environmental effects of actions taken in Antarctica. Nothing in this part shall be construed to create a cause of action.

#### § 641.14 Definitions.

As used in these procedures, the term:

(a) *Action* means a project, program or other activity, including the adoption of an official policy or formal plan, that is undertaken, authorized, adopted or approved by, or subject to the control or responsibility of NSF, the decommissioning of a physical plant or facility, and any change in the scope or intensity of a project, program or action.

(b) *Antarctica* means the area south of 60 degrees south latitude.

(c) *Antarctic environment* means the natural and physical environment of Antarctica and its dependent and associated ecosystems, but excludes social, economic and other environments.

(d) *Antarctic Treaty Consultative Meeting* means a meeting of the Parties to the Antarctic Treaty, held pursuant to Article IX(1) of the Treaty.

(e) *Comprehensive Environmental Evaluation* or *CEE* means a study of the reasonably foreseeable potential effects of a proposed action on the antarctic environment, prepared in accordance with the provisions of §641.18, and includes all comments thereon received during the comment period described

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in § 641.18(c). A Comprehensive Environmental Evaluation shall constitute an environmental impact statement for purposes of the Executive Order.

(f) *Environmental Action Memorandum* means a document briefly describing a proposed action and its potential impacts, if any, on the antarctic environment prepared by the responsible official when he or she determines that a proposed action will have less than a minor or transitory impact on the Antarctic environment.

(g) *Environmental document* means an initial environmental evaluation or a comprehensive environmental evaluation.

(h) *Environmental review* means the environmental review required by the provisions of this part, and includes preliminary environmental review and preparation of an environmental document, and review by the parties to the Protocol, and committees established under the Protocol for that purpose, and the public, as applicable.

(i) *Executive Order* means Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, 44 FR 1957.

(j) *Initial Environmental Evaluation* or *IEE* means a study of the reasonably foreseeable potential effects of a proposed action on the antarctic environment, prepared in accordance with the provisions of § 641.17.

(k) *Preliminary environmental review* means the environmental review described in § 641.15(a).

(l) *Protocol* means the Protocol on Environmental Protection to the Antarctic Treaty, adopted on October 4, 1991, in Madrid, at the fourth session of the Eleventh Special Antarctic Treaty Consultative Meeting and signed by the United States on that date, and all annexes thereto.

(m) *Responsible official* means the Director of the Office of Polar Programs, or any NSF employee(s) designated by the Director to be principally responsible for the preparation of environmental action memoranda or environmental documents under this part.

(n) *Treaty* means the Antarctic Treaty signed in Washington, D.C., on December 1, 1959, T.I.A.S No. 4780.

[57 FR 40339, Sept. 3, 1992, as amended at 59 FR 37433, July 22, 1994]

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### § 641.15 Preliminary environmental review.

(a) The responsible official shall be notified early in the general planning process of actions proposed by USAP components that may have impacts on the Antarctic environment, so that environmental review may be integrated into the planning and decisionmaking processes. The responsible official shall conduct a preliminary environmental review of each action, including consideration of the potential direct and reasonably foreseeable indirect effects of a proposed action on the Antarctic environment.

(b) If, on the basis of the preliminary environmental review, the responsible official determines that an action will have less than a minor or transitory impact on the Antarctic environment, he will prepare an Environmental Action Memorandum briefly summarizing the environmental issues considered and conclusions drawn from the review. No further environmental review shall be necessary.

### § 641.16 Preparation of environmental documents, generally.

(a) *Preparation of an environmental document.* If the responsible official determines, either initially or on the basis of a preliminary environmental review, that a proposed action may have at least a minor or transitory impact on the Antarctic environment, he will prepare an environmental document in accordance with the provisions of this part. In making this determination, the responsible official should consider whether and to what degree the proposed action:

(1) Has the potential to adversely affect the Antarctic environment;

(2) May adversely affect climate and weather patterns;

(3) May adversely affect air or water quality;

(4) May affect atmospheric, terrestrial (including aquatic), glacial or marine environments;

(5) May detrimentally affect the distribution, abundance or productivity or species, or populations of species of fauna and flora;

(6) May further jeopardize endangered or threatened species or populations of such species;

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(7) May degrade, or pose substantial risk to, areas of biological, scientific, historic, aesthetic or wilderness significance;

(8) Has highly uncertain environmental effects, or involves unique or unknown environmental risks; or

(9) Together with other actions, the effects of any one of which is individually insignificant, may have at least minor or transitory cumulative environmental effects.

(b) *Prior assessments.* Notwithstanding the provisions of § 641.16(a), if (1) An environmental document (including a generic or programmatic CEE) or its equivalent has been prepared for a particular type of action; (2) That document includes an analysis of potential environmental effects that are directly relevant to the potential effects of the proposed action, taking in account factors such as the similarity of the actions and of the locations within which they take place; and (3) There are no potential site specific or other impacts that would require further evaluation, then a new environmental document need not be prepared. Instead, the responsible official shall prepare an Environmental Action Memorandum for the proposed action, cross-referencing the previously prepared environmental document.

(c) *Exclusions.* NSF has determined that the following actions will have less than a minor or transitory impact on the Antarctic environment, and are not subject to the procedures set forth in this part, except to the extent provided herein:

(1) Scientific research activities involving:

(i) Low volume collection of biological or geologic specimens, provided no more mammals or birds are taken than can normally be replaced by natural reproduction in the following season;

(ii) Small-scale detonation of explosives in connection with seismic research conducted in the continental interior or Antarctica where there will be no potential for impact on native flora and fauna;

(iii) Use of weather/research balloons, research rockets, and automatic weather stations that are to be retrieved; and

(iv) Use of radioisotopes, provided such use complies with applicable laws and regulations, and with NSF procedures for handling and disposing of radioisotopes.

(2) Interior remodelling and renovation of existing facilities.

Notwithstanding the foregoing, if information developed during the planning of any of the actions described in this paragraph (c) indicates the possibility that the action may have at least a minor or transitory impact on the Antarctic environment, the environmental effects of the action shall be reviewed to determine the need for the preparation of an environmental document.

(d) *Coordination with other committees, offices and federal agencies.* The responsible official shall notify NSF's Committee of Environmental Matters when he intends to prepare an environmental document, and will coordinate preparation of the document with those entities. Responsibility for preparation of the environmental document rests primarily with the responsible official, but, as soon as is feasible, he should consult with and encourage the participation of other knowledgeable individuals within NSF, and, where appropriate, with other individuals, government agencies and entities with relevant knowledge and expertise.

(e) *Type of environmental document.* The type of environmental document required under this part depends on the nature of the proposed action under consideration. An IEE must be prepared for proposed actions which the responsible official concludes may have at least a minor or transitory impact on the Antarctic environment and for which a CEE is not prepared. A CEE must be prepared if an IEE indicates, or if it is otherwise determined, that a proposed action is likely to have more than a minor or transitory impact on the Antarctic environment.

(f) *Obligation of funds.* Because of logistic constraints (*i.e.*, constraints due to transportation difficulties, inaccessibility of Antarctic bases for much of the year, and the need to obtain items or materials requiring long lead times), it may not be possible to complete the environmental review of a proposed action before funds must be committed

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and/or disbursed. In such cases, funds for the proposed action may be committed and/or disbursed, provided:

(1) The appropriate environmental review is completed before implementation of the proposed action in Antarctica, and

(2) Implementation plans for the proposed action will be modified or canceled, if appropriate, in light of the completed environmental review (including public comments, if applicable).

[57 FR 40339, Sept. 3, 1992, as amended at 59 FR 37438, July 22, 1994]

## § 641.17 Initial environmental evaluation.

(a) *Contents.* An IEE shall contain sufficient detail to assess whether a proposed action may have more than a minor or transitory impact on the Antarctic environment, and shall include the following information:

(1) A description of the proposed action, including its purpose, location, duration and intensity; and

(2) Consideration of alternatives to the proposed action and any impacts that the proposed action may have on the Antarctic environment, including cumulative impacts in light of existing and known planned actions and existing information on such actions.

(b) *Further environmental review.* If an IEE indicates that a proposed action is likely to have no more than a minor or transitory impact on the Antarctic environment, no further environmental review of the action is necessary provided that appropriate procedures, which may include monitoring, are put in place to assess and verify the impact of the action.

(c) *Availability to public.* An annual list of IEEs and a description of any decisions taken in consequence thereof shall be provided to the Department of State for circulation to all Parties to the Protocol and to organizations or committees established pursuant to the Protocol or the Treaty, as required. The Environmental Officer, Division of Polar Programs, shall also make the list and copies of final IEEs available to the public upon request.

## 45 CFR Ch. VI (10–1–20 Edition)

## § 641.18 Comprehensive environmental evaluation.

(a) *Scoping.* If it is determined that a CEE will be prepared, the responsible official shall publish a notice of intent to prepare a CEE in the FEDERAL REGISTER, inviting interested persons and government agencies to participate in the process of identifying significant issues relating to the proposed action and determining the scope of the issues to be addressed in the CEE.

(b) *Contents of CEE.* A CEE shall be a concise and analytical document, prepared in accordance with the range of relevant issues identified in the scoping process. It shall contain sufficient information to permit informed consideration of the reasonably foreseeable potential environmental effects of a proposed action and possible alternatives to that proposed action. Such information shall include the following:

(1) A description of the proposed action including its purpose, location, duration and intensity;

(2) A description of the initial baseline environmental state with which predicted changes are to be compared, and a prediction of the future environmental state in the absence of the proposed action;

(3) A description of the methods and data used to forecast the potential impacts of the proposed action;

(4) An estimate of the nature, extent, duration and intensity of the likely direct potential impacts of the proposed action;

(5) A consideration of the potential indirect or second order impacts from the proposed action;

(6) A consideration of potential cumulative impacts of the proposed action in light of existing activities and other known planned actions and available information on those actions;

(7) A description of possible alternatives to the proposed action, including the alternative of not proceeding, and the potential consequences of those alternatives, in sufficient detail to allow a clear basis for choice among the alternatives and the proposed action;

(8) Identification of measures, including monitoring, that could be employed

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to minimize, mitigate or prevent potential impacts of the proposed action, detect unforeseen impacts, provide early warning of any adverse effects, and carry out prompt and effective response to accidents;

(9) Identification of unavoidable potential impacts of the proposed action;

(10) Consideration of the potential effects of the proposed action on the conduct of scientific research and on other existing uses and values;

(11) Identification of gaps in knowledge and uncertainties encountered in compiling the information required by this paragraph (b);

(12) A non-technical summary of the information included in the CEE; and

(13) The name and address of the person and/or organization which prepared the CEE, and the address to which comments thereon should be directed.

(c) *Circulation of draft CEE.* A draft of each CEE shall be provided to the Department of State for circulation to all Parties to the Protocol and to organizations or committees established pursuant to the Protocol or Treaty, as required by the Protocol, and shall be made publicly available. Notice of such public availability shall be published in the FEDERAL REGISTER. All such parties shall have a period of not less than ninety (90) days within which to review and comment upon the draft CEE.

(d) *Final CEE.* A final CEE shall address, and shall include or summarize, comments received on the draft CEE. The final CEE, notice of any decisions related thereto, and any evaluation of the significance of the predicted impacts in relation to the advantages of the proposed action shall be provided to the Department of State for circulation to all Parties to the Protocol, and shall be available to the public upon request, at least sixty (60) days prior to the commencement of the proposed activity in Antarctica. Notice of such public availability shall be published in the FEDERAL REGISTER.

(e) *Implementation of proposed action.* No final decision shall be taken to proceed in Antarctica with an action for which a final CEE is required until after the earlier of:

(1) The first Antarctic Treaty Consultative Meeting taking place at least

one hundred and twenty days after circulation of the draft CEE, or

(2) Fifteen months following the circulation of the draft CEE.

### § 641.19 Modification of environmental documents.

The responsible official should revise or supplement an environmental document if there is a change in a proposed action that may have more than a minor or transitory effect on the antarctic environment, or if there are new circumstances or information that indicate the action may have impacts not anticipated in the original environmental document.

### § 641.20 Notification of the availability of environmental documents and other information.

The Environmental Officer, Office of Polar Programs, shall make Environmental Action Memoranda, environmental documents and final data obtained under § 641.21, available to the public upon request. However, notice of such availability need not be given, except as specifically provided in this part.

[57 FR 40339, Sept. 3, 1992, as amended at 59 FR 37438, July 22, 1994]

### § 641.21 Monitoring.

Scientific, analytic and/or reporting procedures shall be put in place, including appropriate monitoring of key environmental indicators, to assess and verify the potential environmental impacts of actions which are the subject of a CEE. All proposed actions for which an environmental document has been prepared shall include procedures designed to provide a regular and verifiable record of the actual impacts of those actions, in order, *inter alia*, to

(a) Enable assessments to be made of the extent to which such impacts are consistent with the Protocol; and

(b) Provide information useful for minimizing or mitigating those impacts, and, where appropriate, information on the need for suspension, cancellation or modification of the action.

### § 641.22 Cases of emergency.

This part shall not apply to actions taken in cases of emergency relating to the safety of human life or of ships,

aircraft or equipment and facilities of high value, or the protection of the environment which require an action to be taken without completion of the environmental review required by this part. Notice of any such actions which would otherwise have required the preparation of a CEE shall be provided immediately to the Department of State for circulation to all Parties to the Protocol and to committees and organizations established pursuant to the Treaty or Protocol, as required. A description of the emergency action undertaken shall also be provided to the Department of State for appropriate circulation within ninety days of the action.

## PART 650—PATENTS

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### APPENDIX A TO PART 650—OPTIONAL FORMAT FOR CONFIRMATORY LICENSE

AUTHORITY: 35 U.S.C. 200-212, 42 U.S.C. 1870(e) and 1871; and the Presidential Memorandum entitled "Government Patent Policy", issued February 18, 1983.

SOURCE: 57 FR 18053, Apr. 28, 1992, unless otherwise noted.

#### § 650.1 Scope of part.

This part contains the policies, procedures, and clauses that govern allocation of rights to inventions made in performance of NSF-assisted research. It applies to all current and future funding agreements entered into by the

Foundation that relate to performance of scientific or engineering research. As stated in the NSF Acquisition Regulation (chapter 25 of title 48 of the Code of Federal Regulations), this part applies to contracts as well as to grants and cooperative agreements.

#### § 650.2 National Science Foundation patent policy.

As authorized by the National Science Board at its 230th meeting, October 15-16, 1981, the Director of the National Science Foundation has adopted the following statement of NSF patent policy.

(a) In accordance with the Bayh-Dole Act and the Presidential Memorandum entitled "Government Patent Policy" issued February 18, 1983, the Foundation will use the Patent Rights clause prescribed by the Department of Commerce in all its funding agreements for the performance of experimental, developmental, or research work, including awards made to foreign entities, unless the Foundation determines that some other provision would better serve the purposes of that Act or the interests of the United States and the general public.

(b) In funding agreements covered by a treaty or agreement that provides that an international organization or foreign government, research institute, or inventor will own or share patent rights, the Foundation will acquire such patent rights as are necessary to comply with the applicable treaty or agreement.

(c) If an awardee elects not to retain rights to an invention, the Foundation will allow the inventor to retain the principal patent rights unless the awardee, or the inventor's employer if other than the awardee, shows that it would be harmed by that action.

(d) The Foundation will normally allow any patent rights not wanted by the awardee or inventor to be dedicated to the public through publication in scientific journals or as a statutory invention registration. However, if another Federal agency is known to be interested in the relevant technology, the Foundation may give it an opportunity to review and patent the invention so long as that does not inhibit