

§ 674.5

45 CFR Ch. VI (10–1–05 Edition)

§ 674.5 Requirements for collection, handling, documentation, and curation of Antarctic meteorites.

(a) Any person organizing an expedition to or within Antarctica, where one of the purposes of the expedition is to collect meteorites in Antarctica, shall ensure that the meteorites will be properly collected, documented, handled, and curated to preserve their scientific value. Curation includes making specimens available to bona fide scientific researchers on a timely basis, in accordance with specified procedures.

(b) Expedition organizers described in paragraph (a) of this section shall develop and implement written procedures for the collection, documentation, and curation of specimens which include the following components:

(1) *Handling requirements.* Handling procedures shall ensure that the specimens are properly labeled and handled to minimize the potential for contamination from the point of collection to the point of curation. At a minimum, handling procedures shall include:

(i) Handling the samples with clean Teflon or polyethylene coated implements or stainless steel implements (or equivalent);

(ii) Double bagging of samples in Teflon or polyethylene (or equivalent) bags;

(iii) A unique sample identifier included with the sample;

(iv) Keeping the samples frozen at or below -15°C until opened and thawed in a clean laboratory setting at the curation facility; and

(v) Thawing in a clean, dry, non-reactive gas environment, such as nitrogen or argon.

(2) *Sample documentation.* Documentation for each specimen, that includes, at a minimum:

(i) A unique identifier for the sample;

(ii) The date of find;

(iii) The date of collection (if different from date of find);

(iv) The latitude and longitude to within 500 meters of the location of the find and the name of the nearest named geographical feature;

(v) The name, organizational affiliation, and address of the finder or the expedition organizer;

(vi) A physical description of the specimen and of the location of the find; and

(vii) Any observations of the collection activity, such as potential contamination of the specimen.

(3) *Curation.* Make prior arrangements to ensure that any specimens collected in Antarctica will be maintained in a curatorial facility that will:

(i) Preserve the specimens in a manner that precludes chemical or physical degradation;

(ii) Produce an authoritative classification for meteorites that can be shown to belong to a well-established chemical and petrological group, and provide appropriate descriptions for those meteorites that cannot be shown to belong to an established chemical and petrological group;

(iii) Develop and maintain curatorial records associated with the meteorites including collection information, authoritative classification, total known mass, information about handling and sample preparation activities that have been performed on the meteorite, and sub-sample information;

(iv) Submit an appropriate summary of information about the meteorites to the Antarctic Master Directory via the National Antarctic Data Coordination Center as soon as possible, but no later than two years after receipt of samples at the curatorial facility;

(v) Submit information on classification of the meteorite to an internationally recognized meteorite research catalog, such as the "Catalogue of Meteorites" published by the Natural History Museum of London or the "Meteoritical Bulletin" published by the Meteoritical Society;

(vi) Specify procedures by which requests for samples by bonafide scientific researchers will be handled;

(vii) Make samples available to bonafide scientific researchers at no more than incremental cost and within a reasonable period of time; and

(viii) In the event that the initial curatorial facility is no longer in a position to provide curation services for the specimens, or believes that the meteorites no longer merit curation, it shall consult with the National Science Foundation's Office of Polar Programs

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to identify another appropriate curatorial facility, or to determine another appropriate arrangement.

§ 674.6 Submission of information to NSF.

A copy of the written procedures developed by expedition organizers pursuant to § 674.5(b) shall be furnished to the National Science Foundation's Office of Polar Programs at a minimum of 90 days prior to the planned departure date of the expedition for Antarctica. NSF shall publish a notice of availability of the plan in the FEDERAL REGISTER that provides for a 15 day comment period. NSF shall evaluate the procedures in the plan to determine if they are sufficient to ensure that the meteorites will be properly collected, handled, documented, and curated. NSF shall provide comments on the adequacy of the plan within 45 days of receipt. If NSF advises the expedition organizer that the procedures satisfy the requirements of § 674.5 and the procedures are implemented, the expedition organizer will have satisfied the requirements of this part.

§ 674.7 Exception for serendipitous finds.

A person who makes a serendipitous discovery of a meteorite in Antarctica which could not have been reasonably anticipated, may collect the meteorite for scientific research purposes, provided that the meteorite is collected in the manner most likely to prevent contamination under the circumstances, and provided that the meteorite is otherwise handled, documented and curated in accordance with the requirements of § 674.5.

PART 675—MEDICAL CLEARANCE PROCESS FOR DEPLOYMENT TO ANTARCTICA

Sec.

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SOURCE: 62 FR 31522, June 10, 1997, unless otherwise noted.

§ 675.1 Purpose and authority.

(a) This part sets forth the procedures for medical screening to determine whether candidates for participation in the United States Antarctic Program (USAP) are physically qualified and psychologically adapted for assignment or travel to Antarctica. Medical screening examinations are necessary to determine the presence of any physical or psychological conditions that would threaten the health or safety of the candidate or other USAP participants or that could not be effectively treated by the limited medical care capabilities in Antarctica.

(b) Presidential Memorandum No. 6646 (February 5, 1982) (available from the National Science Foundation, Office of Polar Programs, room 755, 4201 Wilson Blvd., Arlington, VA 22230) sets forth the National Science Foundation's overall management responsibilities for the entire United States national program in Antarctica.

§ 675.2 Medical examinations.

(a) Any individual seeking to travel to Antarctica under sponsorship of the United States Antarctic Program must undergo a medical and dental examination to determine whether the individual is physically qualified for deployment to Antarctica.

(b) The medical and dental examinations may be conducted by a qualified licensed physician or dentist of the candidate's choosing, or designated by the employing organization, following instructions provided by the USAP. The medical examinations shall include a medical history, physical examination and appropriate clinical tests which address major organ systems for medical conditions inconsistent with safe deployment to Antarctica.

(c) The candidate's physician/dentist will submit the required medical information on the appropriate USAP-provided forms to a USAP-designated physician who will determine whether the individual is qualified for deployment to Antarctica based upon Medical Clearance Criteria established by the USAP. All information requested on the forms shall be provided.

(d) Candidates who anticipate spending the austral winter in Antarctica