

National Archives and Records Administration

NARA 1441
September 20, 2007

SUBJECT: Appraisal Policy of the National Archives and Records Administration

TO: Office Heads, Staff Directors, ISOO, NHPRC, OIG

Purpose of this transmittal memo. This transmits a revised policy directive that sets out the strategic framework, objectives, and guidelines that NARA will use to determine whether Federal records have archival value.

Explanation of changes. The following change is made:

- A revised entry on Observational Data in the Physical Sciences has been added to Appendix 2, Special Considerations for Selected Types of Records.

Canceled directive. NARA 1441, dated May 17, 2006, is canceled.

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Archivist of the United States

Attachment

National Archives and Records Administration

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SUBJECT: Appraisal Policy of the National Archives and Records Administration

1441.1 Purpose of this directive

a. This policy sets out the strategic framework, objectives, and guidelines that the National Archives and Records Administration (NARA) uses to determine whether Federal records have archival value. It also provides more specific guidelines for appraising certain categories of records.

b. Records appraisal is not a rote exercise. It requires informed judgments, knowledge of and sensitivity to researchers' interests, recognition of resource considerations, and a willingness to acknowledge and understand comments and suggestions from diverse perspectives. This document facilitates the appraisal process by providing a consistent framework for appraisal decision making.

1441.2 Authority for this directive

a. The authority and responsibility of the Archivist of the United States to determine the retention and disposition of Federal records stems from Chapters 21, 29, and 33 of the Federal Records Act, 44 U.S.C.

b. Chapters 21 and 29 of the Federal Records Act, 44 U.S.C. also provide for the transfer of records with archival value to NARA's legal custody when they are no longer needed for the conduct of agency business. NARA 1501, Custody of Federal Records of Archival Value sets out NARA's custody policy.

1441.3 Scope of this directive

a. All Federal governmental entities create and maintain records in the conduct of official business. However, this policy applies only to records subject to the Federal Records Act (FRA) -- records of all executive branch agencies, the United States District and Circuit Courts, and Legislative branch agencies. Records created by the President and Presidential entities, the Senate, the House of Representatives, the Architect of the Capitol, and the Supreme Court are not subject to the FRA. The appraisal of records created by these entities is not covered by this policy.

b. Certain agencies such as the Federal Deposit Insurance Corporation are not wholly governmental and are not subject to the FRA. However, these agencies typically follow FRA regulations and are covered by this policy.

1441.4 Definitions

As employed in this policy, the terms below are defined as follows:

- a. **Appraisal** - the process of determining the value and thus the final disposition of Federal records, making them either temporary or permanent.
- b. **Archival value** - the enduring historical or other value, as determined by the Archivist of the United States, that warrants NARA's continued preservation of records beyond the period required to transact the business of the originating agency or its successor in function. Records determined to have archival value are designated on records disposition schedules as "permanent."
- c. **Intrinsic value** - archival term applied to permanent records that have qualities and characteristics that make the physical form of the record the only acceptable form for preservation.
- d. **Originating agency** - the Federal agency in which records are created, received, and accumulated in the conduct of business.
- e. **Permanent records** - records appraised by NARA as having archival value.
- f. **Sampling** - the selection of file units or items from a body of records made in such a way that, taken together, the items selected are representative of the whole.
- g. **Temporary records** - records approved by NARA for destruction after a specified event or period of time.

1441.5 Appraisal responsibilities and roles

NARA does not appraise records in isolation. As stated in its Strategic Plan, NARA works with other interested parties to ensure that "essential evidence is created, identified, appropriately scheduled, and managed for as long as needed." The Archivist of the United States has the statutory responsibility to decide how long records must be retained and which records have archival value and thus are to be retained permanently. In making appraisal decisions, the Archivist considers the recommendations of NARA staff, and seeks and considers the views expressed by originating agencies and the public.

1441.6 Strategic framework

- a. NARA's mission is to ensure "for the Citizen and the Public Servant, for the President and the Congress and the Courts ready access to essential evidence."
- b. Essential evidence is comprised of those records that document the:
 - (1) Rights of American citizens;
 - (2) Actions of Federal officials; and

(3) National experience.

c. Records that document the rights of citizens enable them to establish their identities, protect their rights, and claim their entitlements. Records that document actions of Federal officials that enable them to explain past decisions, form future policy, and be accountable for consequences. Records that document the national experience provide the means for evaluating the effects of Federal actions on the nation and for understanding its history, science, and culture, including the man-made and natural environment.

d. Not all records that constitute essential evidence possess archival value. Rather, NARA authorizes agencies to destroy most of these records when they are no longer needed to meet agency business needs.

e. Records that are appropriate for permanent retention are discussed below, using as a framework the definition of essential evidence spelled out in NARA's Strategic Plan.

1441.7 Permanent records categories

NARA uses the categories specified in the Strategic Plan as the beginning point for appraisal. These categories provide an overall high-level framework for the analysis of records to determine whether or not they are permanent. Note that the three categories are not mutually exclusive: some records that warrant permanent retention may fit into multiple categories, while others may relate to a single category.

a. **Records documenting the rights of citizens** - Many Federal records provide evidence of the legal status, rights, and obligations of individuals, groups, organizations, and governmental bodies. In most cases, the legal rights implications of records eventually expire. In a few instances, however, the importance of records for protecting legal rights endures despite the passage of time. Records falling into this category are preserved permanently.

b. **Records documenting the actions of Federal officials** - Most Federal records document the actions of the Government. NARA seeks to retain that portion containing significant documentation of Government activities and essential to understanding and evaluating Federal actions. For example, NARA retains permanently those records that document the basic organizational structure of Federal agencies and organizational changes over time, policies and procedures that pertain to an agency's core mission, and key agency decisions and actions.

c. **Records documenting the national experience** - Some records document the impact of Federal actions on individuals, communities, or the natural and man-made environment. The Government also creates and acquires much information about people, places, material objects, and scientific phenomena, as well as about social conditions, political and economic activities, and events in the United States and other countries. Much of this information does not have archival value. However, some is essential to understanding the role of the Federal Government and the history of our nation, its people, and the environment.

1441.8 Appraisal objectives

Within the high-level strategic framework of rights, actions of Federal officials, and the national experience outlined above, NARA will identify for permanent retention records that:

- a. Retain their importance for documenting legal status, rights and obligations of individuals, groups, organizations, and governmental bodies despite the passage of time;
- b. Provide evidence of significant policy formulation and business processes of the Government;
- c. Provide evidence of our Government's conduct of foreign relations and national defense;
- d. Provide evidence of Federal deliberations, decisions, and actions relating to major social, economic, and environmental issues;
- e. Provide evidence of the significant effects of Federal programs and actions on individuals, communities, and the natural and man-made environment;
- f. Contribute substantially to knowledge and understanding of the people and communities of our nation.

1441.9 General and specific guidelines

NARA uses the general guidelines outlined in appendix 1 to determine which records support its appraisal objectives and thus warrant permanent retention. NARA has also developed specific appraisal guidelines for selected kinds of records (see appendix 2). Permanently valuable records sometimes have qualities and characteristics that make the records in their original physical form the only archivally acceptable form for preservation. The qualities and characteristics of records with intrinsic value are outlined in appendix 3.

1441.10 Reappraisal

NARA will reappraise records when there is compelling evidence that earlier appraisal decisions require review. In such circumstances, NARA will seek Federal agency and public involvement in the reappraisal process.

1441.11 Policy review

NARA will review this policy as necessary in consultation with Federal agencies, research communities, and other interested parties.

1441.12 How are records created by this directive maintained under the NARA records schedule?

Maintain records created by this directive in accordance with the NARA records schedule (NARA Files Maintenance and Records Disposition Manual Records Disposition Manual [FILES 203]), items 1307 – 1311.

Appendix 1 - General appraisal guidelines

In appraising records to decide whether records have archival value and should be retained permanently, NARA will use the guidelines found below. Applying the guidelines to specific cases will not be a mechanical process akin to adding up points or checking boxes. However, using these guidelines will make decision making easier and will result in more consistent appraisal judgments that can be readily explained both within NARA and to outside constituents. In developing appraisal recommendations for the Archivist of the United States, NARA staff must address the following questions. The questions should be considered together, rather than in isolation.

How significant are the records for research?

The future research potential of records is the most difficult variable to determine. What is of relatively low research use today may become of great research use in the future. Perhaps even more important and difficult to predict are the issues and topics that will be considered of significance in the future. Nevertheless, it is important to consider this question in making appraisal decisions. It is necessary to consider the kinds and extent of current research use and to try to make inferences about anticipated use both by the public and by the Government.

How significant is the source and context of the records?

The significance of the functions and activities performed by the originating agency or agencies and the business context within which the records are created are important considerations for the appraiser. The appraiser must relate the source and context of the records to the strategic framework and objectives found in this directive.

Is the information unique?

Appraisals must be conducted in context with other records. The appraiser must determine whether the records under consideration are the only or most complete source for significant information. Records that contain information not available in other records (including other Federal records as well as files accumulated by state and local governments) are more likely to warrant permanent retention than records containing data that is duplicated in other sources. However, NARA may decide to retain records that contain information available elsewhere in the case of records that are more complete or more easily accessible than the alternative source.

How usable are the records?

Consider these three issues:

- 1. How does the way records were gathered, organized, presented, or used in the course of business affect their usability?** For example, records whose arrangement, indexing, or other identifying information makes it easy to locate needed information are more likely to warrant retention than records containing similar documentation that are extremely difficult to use.
- 2. How do technical considerations affect the usability of the records?** For example, some electronic records may pose such technological challenges that extraordinary measures may be required to recover the information, while other records containing

similar documentation (either electronic records or records in another format) may be usable with much less effort.

3. How does the physical condition of the records affect their usability? For example, some records may have deteriorated to the point that the information they contain is not readable.

Do these records serve as a finding aid to other permanent records?

Records that can be used as a finding aid to other records may warrant retention even if the information they contain is not unique or complete. For example, the records may enable a researcher to identify which state or local government holds birth certificates, marriage licenses, and other documents relevant to his or her research.

What is the timeframe covered by the information?

“Timeframe” may refer to the date span of the entire body of records or the length of time that individual records or file units typically cover.

1. The longer the date span for which there are extant files, the more valuable the records are likely to be for research. For example, they might be valuable to support longitudinal studies by the Government or other researchers.

2. Some bodies of records are made up of individual documents or files whose content covers many years. This attribute includes records where the documents in individual files are accumulated over a relatively short period but contain information pertaining to events covering a long period of time (e.g., official military personnel folders or military unit histories).

Do the records document decisions that set precedents?

Do decisions or actions of the originating agency set precedents, or is each decision or action independent of others and merely based on policy set at some higher level? If the former, the records are more likely to warrant permanent retention. Examples include appellate court decisions and policy files at the highest level within an agency.

Are the records related to other permanent records?

Other things being equal, records that add significantly to the meaning or value of other records already appraised as permanent are more likely to warrant retention than records lacking such a relationship. Records that are chronological continuations of records already in the National Archives are likely to warrant permanent retention, particularly if the older segments of the records are subject to high reference use.

Do the files contain non-archival records?

Files that contain only a small interspersed of records lacking archival value (i.e., non-archival records), such as routine fiscal documents, records relating to the issuance of expendable supplies, etc. are more likely to be appraised as permanent than records where the interspersed of non-archival documents is high, particularly if the overall volume of the records is large. When the volume of records containing some highly valuable material is relatively small, it may still be appropriate to appraise the records for permanent retention even if a significant fraction

of the records lack archival value. Disposition instructions should allow (but not require) NARA to dispose of non-archival records after the originating agency transfers the records to NARA's legal custody.

What are the cost considerations for long-term maintenance of the records?

This consideration should play a significant role only in marginal cases. In such cases, an appraisal should balance the anticipated research potential of the records with the resource implications of retaining them permanently. Other things being equal, records with low long-term cost implications are more likely to warrant permanent retention than those records that carry high long-term costs.

What is the volume of records?

Propose for permanent retention (regardless of volume) records that are clearly permanent in accordance with other appraisal guidelines. Volume will play a role only in the appraisal of records whose archival value is marginal. Other things being equal, records that are compact are more likely to be appraised as permanent than those that are voluminous.

Is sampling an appropriate appraisal tool?

Appraisal decisions that call for sampling records may be made only after careful analysis of all other options and the costs and benefits of implementing a sampling decision. A sampling disposition will not be used where this option merely defers problems. Wherever possible, a sampling disposition should be avoided where the disposition requires item by item decisions to retain individual records or individual file units.

Appraisal decisions involving sampling must specify a process that permits the easy identification of records that are to be retained permanently.

- Processes that involve subjective judgments or item by item decisions to retain individual records or individual file units require a justification detailing the circumstances that prevent an objective, easily implemented process and estimating the staff hours required to perform the sampling on a year's accumulation of records.
- Appraisal decisions involving sampling must specify whether the originating agency or NARA will be responsible for implementing the sampling work.
- Where the need for sampling is driven by the originating agency, this appraisal decision should only be made if the agency is strongly committed to doing the sampling work.
- Where the need for sampling is driven by NARA staff, this appraisal decision should only be made if NARA archival personnel are strongly committed to doing the sampling work and have the resources to do it.

Appendix 2 - Special considerations for selected types of records

Some types of records require special consideration in the appraisal process. The appraisal factors identified in this appendix will be used together with the general guidelines in Appendix 1 and the strategic framework and objectives found in the main body of this policy document. This appendix will be expanded if guidelines for additional types of records are developed.

PERSONAL DATA

Personal data records contain information about an individual and may also include information about his or her family members. Included are such records as the personnel folders of Federal employees and members of the armed services; the files that are accumulated in connection with determining an individual's eligibility for Federal Government benefits, such as a pension, medical care, or mortgage guaranty; and the records that document the immigration to the United States of the foreign born or their application for legal residence or citizenship.

In appraising personal data records, it is necessary to take into account the following:

- **Size and nature of the population**

Some personal data records cover nearly all of the American population. Records of this sort are more likely to warrant permanent retention than records containing information on only a small percentage of the population. However, even if the total number of people represented in a body of personal data records is relatively low, the records may still warrant permanent retention if they contain information concerning a large percentage of a subgroup of the American population (e.g., an ethnic or racial group or residents of a specific region).

- **Nature of the information**

Researchers who use personal data records have traditionally had a high interest in the following types of information concerning individuals. Records that are rich in the kinds of information outlined below are more likely to warrant permanent retention than records that contain only a small number of these elements:

- previously used names
- date and place of birth, place(s) of residence;
- date, place, and cause of death;
- if foreign-born, date and place of arrival in the US, and if naturalized, date and place of naturalization;
- names of parents;
- dates and places of parents' births and deaths;
- name(s) of spouse(s), date(s) and place(s) of marriage;
- names of children;
- date and place of children's birth;
- education level;
- educational institutions attended and the dates;

- occupation;
- property ownership;
- names of employers and work location(s)
- military service, including branch of service, dates of service, and rank
- identification photographs of individuals

Researchers appear to be increasingly interested in medical information as well. NOTE: It will be necessary to monitor possible effects of the Health Insurance Portability and Accountability Act (HIPAA) on access to medical information.

OBSERVATIONAL DATA IN THE PHYSICAL SCIENCES

The physical sciences encompass any of the sciences that analyze the nature and properties of energy and nonliving matter (thereby excluding the biological sciences and social sciences). The physical sciences include chemistry, physics, the space sciences (astronomy, planetary science, and space physics), and a number of earth sciences (including geology, hydrology, meteorology, oceanography, and soil science). These disciplines often are overlapping, as illustrated by space physics, chemical physics, physical chemistry, and geophysics.

While some of the physical sciences (including chemistry and materials sciences) produce experimental data, many of them (including the space sciences and earth sciences) collect data on the observation of natural phenomena. Observational data characteristically are unique and non-repeatable and can be generated in large volumes.

Federal agencies follow a standard work process for developing and using observational data. The steps in this process are collecting, processing, and interpreting data; preparing related products; and documenting, storing, cataloging, and managing data and products to make them available for continuing use.

Raw observational data are collected by means of human perception or measurement (e.g., field notes) or, more commonly, by sensor or other instrument. *In situ* data collection is carried out in direct contact with the phenomenon under study. Examples of *in situ* sensors are stream flow gauges, seismic gauges, and sensor packages mounted on buoys. By contrast, remote sensing involves use of instruments, such as cameras or digital sensors, not in close contact with the studied phenomenon.

Data may be collected in any location – the earth, the atmosphere, or in space. In recent decades, data usually have been collected in digital formats, although in the past they commonly were collected in analog formats, such as paper or photographs, a portion of which may not have been converted to digital format.

After collecting raw data, scientists process them at different levels of complexity. Each processing level provides added value through such actions as summarizing and interpreting the raw data and synthesizing new data. Production of processed data may involve incorporating two or more sources, raw or processed, to generate yet another data product, for example, the merging of observational and elevation data to produce three-dimensional representations. Processed data frequently are subjected to scientific peer review. A dataset consists of a body of

related data (raw and/or processed), for example, data gathered from a particular satellite sensor for a given time period and geographic region.

Data originators are responsible for documenting their data, including preparation of metadata (i.e., the auxiliary information needed to understand and use data properly). Data originators also are generally responsible for submitting their data and metadata to a data center for long-term storage. Such centers catalog the data and make them available for continuing use, often by posting the data or linkages to the data on appropriate websites.

Primary use of observational data is usually by scientists involved in collecting and initially processing the data. Secondary use of data is by others than those involved in collection and initial processing. Secondary users include scientists and non-scientists. Scientists often exploit the data in new ways and, in so doing, may create additional processed datasets. Non-scientists use data in a variety of ways. For example, farmers use climatological data for decisions on crop selection, and engineers use seismic data in designing critical structures such as nuclear power plants.

Primary or secondary use of data can result in preparation and dissemination of related products – either processed data or non-data products. Examples of non-data products are (1) hurricane warnings and weather forecasts prepared from meteorological data, (2) navigation charts and maps prepared from oceanographic data, and (3) maps of flood-prone areas prepared from hydrologic data. Certain products are produced by running data through a model (software using mathematical formulas) used to simulate natural phenomena. Such models may generate, for example, products used to forecast the weather or the progress of a wildfire.

Agencies holding large quantities of observational data include the National Oceanic and Atmospheric Administration (NOAA), National Aeronautics and Space Administration (NASA), and U.S. Geological Survey (USGS). These agencies both collect data themselves and receive data submitted by outside entities. The agencies maintain *in situ* and remotely sensed data pertaining primarily to space and the global environment, including the atmosphere, ocean, and land surface. These data are stored, cataloged, and distributed by multiple data centers. The observations not only support real-time monitoring and forecasting but over time provide a historical record.

Appraisal considerations:

- Appraisal of observational data is challenging because appraisers frequently must deal with a high volume of data and become familiar with a diversity of data structures and platforms, metadata requirements, and media types including paper, audio-visual, and electronic.
- Observational data are likely to be appraised as either long-term temporary or permanent. Unlike laboratory experimental data, observational data typically document phenomena that can never be repeated. Observational data establish a baseline to help determine future rates of change and frequency of occurrence of unusual events. Moreover, observational data frequently can be processed and used in novel ways, for example, to verify new scientific concepts.

- Observational data covering a long time period tend to have more value because they enable long-term patterns to be identified and thereby increase confidence in the reliability of data and the conclusions drawn from them. In addition, data are more likely to be appraised as permanent if they not only can be used for scientific purposes but also for legal, commercial, educational, engineering, resource management, or other purposes.
- Appraisal decisions should take into account that the uses of data vary according to the level of processing. Raw or minimally processed data are more difficult for anyone except the primary user(s) to understand and use but are essential for conducting a reanalysis, such as to verify findings or support a new hypothesis. With each higher level of processing, data generally become easier to use but less subject to reanalysis. To facilitate future reanalysis, it is usually appropriate to preserve processed data at the lowest level of processing compatible with effective use. Processed data are more likely to have long-term value if they would be costly to recreate from the raw data. It may be warranted to appraise as permanent both a raw version and one or more processed versions of certain data.
- To be appropriate for long-term temporary or permanent retention, observational data should possess authenticity, reliability, integrity, and usability (as defined in ISO 15489-1). Intellectual linkage with the related metadata is essential, and linkage with program or project management records is desirable to provide additional context for the data.
- Additional factors favoring long-term or permanent retention are uniqueness, completeness, and quality of observational data; quality and completeness of metadata; and availability of appropriate technology to enable access. In general, data are more likely to have these attributes if the data have successfully undergone the scientific peer review process. Distributed storage of data does not diminish their archival value, provided that a central catalog is maintained to ensure access.
- Metadata should include information such as purpose and time period of data collection; location of collection site; methods and instrumentation used in collection; units of measurement, acceptable values, and error tolerance; data aggregation methods; processing history; and quality assessment. The types of metadata required vary with the nature of the data and their likely future uses. It is preferable for metadata, whenever possible, to conform to standards issued by such broad-based organizations as the Federal Geographic Data Committee (FGDC) and the International Organization for Standardization (ISO).
- It is appropriate for many observational data of long-term temporary or permanent value to be maintained on a continuing basis by a scientific data center that possesses the necessary expertise to ensure preservation and access. Data centers often issue policies on collecting and data sharing. NARA appraisers will benefit from reviewing these policies and identifying the standards used to determine which data have value for long-term scientific purposes. Similarly, appraisers should seek the advice of scientists when assessing many of the above-mentioned attributes of data and metadata.
- Many data series now collected in electronic format were formerly created and maintained in other formats such as paper or photographs. Agencies may still maintain older data in such formats for use in conjunction with the related electronic data. Appraisers should extend their

review of electronic systems to include any related data in other formats, as these older data may add to the usefulness of the electronic data if they are still in a usable format. All formats should be considered during the appraisal.

- Models are rarely if ever appropriate for appraisal as permanent. Models generally are in a continuous state of development, so that one model will replace another as soon as its value is demonstrated (e.g., improved accuracy in forecasting hydrologic conditions). Data products that result from running data through a model may warrant permanent retention if they relate to a significant phenomenon or occurrence.

ENVIRONMENTAL HEALTH AND SAFETY RECORDS

This section covers environmental health and safety (EH&S) records relating to Federal actions in regard to hazardous substances and their potential harmful effects on humans and the environment. The types of hazardous substances are diverse and include radioactive substances, asbestos, certain metals such as lead and mercury, synthetic chemicals (such as PCBs), petroleum products, and munitions. Not covered here are records relating to the following types of environmental health and safety hazards: communicable disease agents, fires and natural disasters, and hazards from use of tools and equipment.

Federal government agencies undertake several broad functions that generate a wide variety of EH&S records. The first is production, use, storage, transportation, and disposal of hazardous substances. The second consists of planning and routine monitoring of actions involving potential release of hazardous materials into the environment and exposure of people to them. Planning includes preparation of environmental impact statements (EISs) and similar documents.

A third EH&S function involves emergency response, monitoring, and remediation of spills and other inadvertent or unauthorized releases. These actions may involve either short-term, prompt removal of hazardous substances or long-term remedial response. Monitoring may be included in either the second or third above-mentioned EH&S function and generally consists of data collection, analysis, and documentation of releases and exposure involving hazardous substances. A fourth EH&S function relates to conducting litigation and responding to claims relating to potential harm caused by hazardous substances to individuals and the environment. The third and fourth EH&S functions may relate to substances not known to be hazardous at the time of production, use, or disposal.

Numerous environmental laws establish requirements, including those for recordkeeping, in regard to hazardous substances. Many of these laws require Federal agencies to comply with general environmental standards for production, use, and disposal of hazardous substances, as well as for environmental planning and routine monitoring. An example is the National Environmental Policy Act (NEPA), which mandates that agencies formally analyze the environmental consequences of a proposed major action and consider possible alternatives.

Environmental laws give certain agencies jurisdiction over emergency response and cleanup involving significant releases, spills, and waste sites, including those not caused by the Federal government. These laws set strict requirements for financial oversight and involvement of the public in regard to response and cleanup.

The most important of such laws are the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and its reauthorizing legislation, the Superfund Amendments and Reauthorization Act (SARA). CERCLA and SARA give the Environmental Protection Agency (EPA) overall authority for most major environmental remediation and establish the Superfund to support this remediation. Under the aegis of these and similar laws, national defense agencies perform cleanup of former military sites in conformance with the Defense Base Closure and Realignment Act of 1990 (BRAC), Formerly Used Defense Sites (FUDS) program, and similar programs.

In addition, the Oil Pollution Act (OPA) gives certain agencies, such as the National Oceanic and Atmospheric Administration, authority for response and remediation for major oil spills. Lastly, a number of Federal laws provide for financial compensation to certain workers and other individuals exposed to hazardous substances.

Appraisal considerations:

- The National Environmental Policy Act (NEPA) requires Federal agencies to prepare environmental impact statements (EISs) for major Federal actions that significantly affect the quality of the environment. An EIS is a full disclosure document that details the process through which a project was developed, considers a range of reasonable alternatives, analyzes the potential impacts resulting from the alternatives, and demonstrates compliance with other applicable environmental laws and executive orders. The EPA collects and maintains a record set of agency environmental impact statements (EISs). These EISs, which are scheduled for permanent retention, provide important evidence of agency decision-making and the condition of the environment before actions are taken.
- Copies of EISs held by the creating agencies usually are scheduled as temporary. Other agency environmental planning records, such as environmental assessments and categorical exclusions, also tend to be scheduled as temporary because they document environmental decisions of lesser magnitude than those covered by EISs. Long-term temporary retention may be appropriate for agency EISs and related planning records due to their legal importance in documenting environmental changes.
- A number of agencies involved in major environmental remediation actions are required to maintain an Administrative Record (AR) documenting the decision-making process and public participation in the remediation. An AR is the complete body of documents that forms the basis for selecting a response action (i.e., documents considered or relied upon in selecting a remedy). The AR and other major remedial records frequently are appraised as permanent because they help document both significant environmental damage and proposed restoration activities. Such records are likely to have particular value for local history, because they describe and measure the consequences of damage to communities, their local economies, and their immediate environment.
- Fiscal and administrative records accumulated during cleanup and restoration tend to have long term temporary retentions. The process of assessing damage and implementing restoration can take years, and the associated costs charged to parties responsible for the

damage can be considerable. Retention periods of thirty years beyond case closure or restoration completion are frequently applied to contracts and accounting and financial records that ordinarily would have much shorter retentions if covered by the General Records Schedules.

- Records documenting the Federal Government's disposal of individual pieces of real property often have permanent value, because such records may document the condition of the site at the end of a particular phase of operations, prior to change of ownership.
- Irreproducible data supporting epidemiological studies or other significant analyses of exposure of humans and the environment to chemicals, pesticides, and hazardous wastes may have sufficient value to warrant permanent retention, depending on the breadth and scope of the analysis and the reusability of the data.
- Data that track or model long-term exposure conditions and responses at abandoned, inactive, or uncontrolled waste sites and the releases of hazardous wastes may also have sufficient value for permanent retention, depending upon the general public or research community interest in the site or release and the purpose for which the data was collected. Although programs marginally involved with high profile events and sites often keep considerable amounts of related data, the data documenting the activities and/or programs having responsibilities directly associated with the event or site are the most likely to have permanent value.
- Claims files relating to health and safety issues are generally disposable in either electronic or hardcopy form, though they may have lengthy retention periods. Information systems for managing claims files, however, may be permanent, as the data can be manipulated and may have value for documenting the number and types of cases, as well as their handling and disposition.
- Photographs, films, videos, and other audio-visual records relating to the production, use, and disposal of hazardous substances often are of permanent value, because they help document such matters as work processes, working conditions, and layout of hazardous waste sites.
- Other records concerning the production, use and proper disposal of hazardous substances are usually appraised as temporary. Examples of such records are manufacturing or construction project files, Material Safety Data Sheets, calibration records, inventory and inspection records, shipping manifests, chain of custody documents, and certificates of disposal. Some of these records have lengthy temporary retentions to protect the rights and interests of individuals, organizations, and the government in regard to the potential long-term harm caused by hazardous materials. The longest retentions generally are provided for records relating to radioactive material, because of its ongoing potential for harm. Also, records and data resulting from routine monitoring of individuals' exposure to hazardous substances generally have long-term temporary retentions to protect rights and interests.
- Records and data relating to production, use, disposal, and routine monitoring of hazardous substances may be subject to an agency-imposed disposition moratorium because of their long-term utility for litigation, environmental investigations, and epidemiological studies.

Such a moratorium generally does not mean that the records and data are appropriate for permanent retention.

- When Federal law or regulation specifies a minimum retention period for particular EH&S records, it usually is appropriate to schedule retention for that minimum period. However, longer retention may be necessary when an agency has special legal or business requirements for the records, and permanent retention may even be warranted in rare circumstances.

RESEARCH AND DEVELOPMENT (R&D) RECORDS

This section discusses research and development (R&D) records relating to the planning and execution of basic and applied research in engineering and the physical and natural sciences. Basic research seeks to generate new knowledge, and applied research uses the results of basic research and applies them to the design, development, and testing of new products and processes. Agency R&D programs tend to be large in scale, expending hundreds of millions of dollars annually and generating voluminous records. Records pertain to such research fields as biology, chemistry, medicine, physics, materials science, aerospace technology, weapons development, computer science, energy development, and environmental protection.

Appraisal of the records requires an understanding of the entire R&D business process, including the project/product lifecycle and use of outside entities for review or support. Most R&D conducted by or for the Federal government follows a standard workflow based on the scientific method. The basic steps include formulating a hypothesis or statement of need, obtaining approval and/or funding, designing and conducting experiments and analyzing results, and disseminating findings. Records created and accumulated by these steps can be separated into the following categories: program management records covering the processes of formulation, selection, and funding; project records covering design, collection, analysis, and reporting; and dissemination of findings. Types of records found under these categories include planning records, project files, procurement and financial records, laboratory notebooks, research data, and technical reports and similar publications.

The status and availability of records produced by a project often depend upon the funding arrangement. For projects funded by contracts, records specified in the contract as deliverables generally are Federal records and, in conformance with the contract requirements, may be maintained by either the contractor or the funding agency. By contrast, the primary records of grant-funded projects usually are not considered to be Federal records and are maintained by the grantee. Recordkeeping for collaborative projects is affected by the diversity of funding sources and institutions (including non-Federal institutions) involved. Effective appraisal of these records requires a determination of which institutions have responsibility for the records and their disposition.

Appraisal considerations:

- Program management records that document the planning, policies, and priorities of research programs usually are appraised as permanent. Such records may be maintained by offices with agency-wide R&D responsibilities, by individual divisions and laboratories, and by

scientific and technical advisory bodies. Using the guidance in appendix 1 – General Appraisal Guidelines, appraisers should determine for which office(s) within a given agency these records should be scheduled as permanent.

- Technical reports, conference proceedings, and similar publications that disseminate the findings, methodology, and conclusions of projects are usually appraised as permanent and are often maintained centrally by an agency component responsible for their collection, management, and distribution. Review of a cross-section of such publications can help determine the subject matter and scope of R&D projects and thereby prove useful in assessing the value of other project-related records and data.
- Project files may include such records as statements of work, progress reports, briefing papers and presentations, specifications and drawings, laboratory notebooks, research data, environmental and safety information, and technical reports. Agencies may maintain such files as case files or as separate series. The value of project files varies across R&D programs, based on such factors as the files' organization and content, nature and scope of the research, and extent to which separately maintained series of records such as annual reports, planning records and technical reports provide sufficient documentation of the projects.
- Because many R&D projects have a very limited focus and project records often are voluminous, a very strong justification is needed to appraise all of an agency's project files as permanent. If selection criteria are to be applied to identify files for permanent retention, the creating agency or organization must devise a practical arrangement for applying the criteria to the records and agree to implement it, because it is the creating agency which possesses the expertise and resources to evaluate the files individually. For overall guidance on when to apply selection criteria, see appendix 1 – General Appraisal Guidelines – “Is sampling an appropriate appraisal tool?”
- Contracting, procurement and other fiscal records generally are appraised as temporary when readily segregable from other project records.
- Laboratory notebooks may be informally maintained as part of project files, or as a separate series, issued formally and strictly controlled to protect intellectual property and patent rights. Notebooks issued and managed formally are more likely to be appraised as having long-term temporary value or possibly permanent value.
- Research data created by R&D projects may be unprocessed (raw) or processed (compiled or analyzed) at different levels. Raw data are generated by an experiment, whereas processed data consist of raw data manipulated to help identify patterns in the data. It is very difficult to generalize about the value of processed data as opposed to raw data, as both have their own significance for the research process. Research data most often are electronic but also may be in another format such as paper or photographs. To help establish the value of still photographs and moving images, whether conventional or digital, maintained separately from other project records, appraisers need to determine whether the agency maintains intellectual linkage between these and related project records.
- Research data commonly have short-term value when they are narrow in scope and can be

replicated by a new experiment if necessary. Data may have long-term temporary or even permanent value when they are extremely difficult or impossible to replicate and are potentially useful for such purposes as permitting an important experiment to be reviewed and validated, supporting new scientific research, or providing a legal basis for health-related claims.

- For data to be valuable over the long term, they should be unique, complete, valid, and accompanied by appropriate metadata. Moreover, data are usually more valuable when they can be linked to records describing the research protocol and modes of analysis. In considering these qualities of data, appraisers should consult with the relevant scientific experts. Data with long-term research value often are most appropriately maintained by the R&D agencies which created them because the creating agencies usually possess the scientific expertise essential for providing effective access to the data.
- R&D agencies, particularly those involved in environmental or health research, may create tissue samples, slides, and specimens which are treated by researchers as project records and preserved by the agency for long periods at substantial expense. Although NARA generally does not consider such materials to meet the definition of Federal records, agencies nonetheless need to manage them properly because of their importance to R&D programs and potential for long-term use.

Appendix 3 – Qualities and characteristics of records with intrinsic value

Documentary materials, regardless of origin, having intrinsic value are rare and possess one or more of the following specific qualities or characteristics. These qualities and characteristics relate to the physical nature of the records, their prospective uses, and the information they contain. NARA will use the guidelines below in deciding whether permanent records have intrinsic value and should be retained in their original form.

1. *Physical form that may be the subject for study if the records provide meaningful documentation or significant examples of the form*

Documents may be preserved in their original form as evidence of technological development. For example, a series of early press copies, glass-plate negatives, or wax-cylinder sound recordings may be retained. All records having a particular physical form would not be considered to have intrinsic value because of this characteristic; however, a selection broad enough to provide evidence of technological development would be considered to have some value. Determination of intrinsic value based on a particular technology would be rare since it would be preserving a particular form for its value as an artifact rather than for archival value.

2. *Aesthetic or artistic quality*

Records having aesthetic or artistic quality may include manuscripts; photographs; pencil, ink, or watercolor sketches; maps; architectural drawings; frakturs; and engraved or printed forms, such as bounty-land warrants.

3. *Unique, curious, or historical physical features or formats*

Physical features that are unique, curious, or historically significant might include quality; texture of paper; color; wax seals; imprints and watermarks; inks; and early or unusual bindings. All records having a particular physical feature would not be considered to have intrinsic value because of this feature; however, a representative selection of each type would be considered to have such value.

4. *Age provides a quality of uniqueness*

Age is a relative rather than an absolute quality. Generally, records of earlier date are of more significance than records of later date. This can be because of a historical change in the functions and activities of the creator of the records, the scarcity of earlier records, a change in recordkeeping practices, or a combination of these.

5. *Value for use in exhibits*

Records used frequently for exhibits normally have several qualities and characteristics that give them intrinsic value. Records with exhibit value impressively convey the immediacy of an event, depict a significant issue, or impart a sense of the person who is the subject or originator of the record. In these cases, the impact of the original document cannot be equaled by a copy.

6. *Questionable authenticity, date, author, or other characteristic that is significant and ascertainable by physical examination*

Some records are of doubtful authenticity or have informational content that is open to question. Although it is impossible to foresee which documents will be questioned in the future, certain types of documents are well known to have the potential for controversy and, if the original records are extant, handwriting and signatures can be examined, paper

age can be ascertained, and other physical tests can be performed. In some cases the controversy can be resolved by recourse to the original item (such as by examination of the handwriting, the age of the paper, or the original negative of the photo static print), while in other cases the item will not be conclusive but will provide the researcher with the best evidence from which to draw conclusions (original photographs of unidentified flying objects, for example).