DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE MANUAL

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Release No. 185

November. 20, 1990 J

SUBJECT: Administrative Series

Part 381 Origination of Records

and Information

Chapter 7 Electronic Information

EXPLANATION OF MATERIAL TRANSMITTED:

This chapter establishes policy and standards and delineates responsibilities for the effective and efficient handling of automated data processing records within the Minerals Management Service.

Director

FILING INSTRUCTIONS:

REMOVE:

INSERT:

None

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380 7 1-12 185

OPR: Records and Mail Management Section

Support Services Branch

Financial and Support Services Division

Office of Administration

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1. <u>Purpose</u>. The purpose of this chapter is to establish policy, delineate responsibilities, provide guidelines, and establish requirements and procedures for information created, used, maintained, and disposed of in electronic form which includes all data files and data bases including test information in an office automation system within the Minerals Management Service (MMS).

2. Authority.

- A. 44 U.S.C. Chapters 21, 29, 31, and 33.
- B. National Archives and Records Administration (National Archives) Regulations (36 CFR 1220, 1222, 1228, and 1234).
- C. Federal Information Resources Management Regulations (FIRMR) (41 CFR 201-22 and 201-45).
- D. Departmental Manual (382 DM 11, Managing Records in Electronic Form).
- 3. <u>References</u>. MMS Manual (MMSM) 375.19 Automated Information Resources Security Program; MMSM 380.2 Records Management; and MMSM 380.2-H Records Management Handbook.
- 4. <u>Definitions</u>. See Glossary, Appendix 1.
- 5. <u>Policy</u>. All information created, used, maintained, or stored in electronic form will be retrievable, protected from unauthorized disclosure, and disposed of only in compliance with MMSM 380.2-H and the General Records Schedules (GRS). This chapter applies to all electronic records systems, whether on microprocessors, minior mainframe computers, regardless of storage media, in network or stand-alone configurations.

6. Responsibilities.

- A. All Associate and Regional Directors, the Chiefs of the Offices of Congressional and Legislative Affairs, Public Affairs, and Equal Employment Opportunity, and the Administrative Service Center Managers are responsible for:
- (1) Ensuring compliance with the provisions of this chapter and all other information management practices;
- (2) Ensuring that practices and procedures are implemented to protect information created or acquired in electronic form from loss, removal, theft, or unauthorized access or alteration;

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- (3) Ensuring efficient and cost effective use of electronic information; and
- (4) Integrating the management of electronic information with other information resource management programs.
- B. The Associate Director for Management and Budget has overall responsibility for the records management program, which includes the creation, maintenance, and disposition of electronic information.
- C. The Deputy Associate Director for Administration has administrative responsibility for implementation of the Records Management Program.
- D. <u>ADP Managers</u> are responsible for complying with the requirements of this chapter in developing electronic information systems, ensuring adequate documentation, applying approved disposition authorities, and ensuring system security to prevent unauthorized disclosure of the data contained in the system.

E. The Records Manager is responsible for:

- (1) Informing MMS offices of current Government standards and procedures relating to electronic information;
- (2) Reviewing, coordinating, and transmitting National Archives Form 14208 and Standard Form 115 to the National Archives for the scheduling of the electronic information;
- (3) Establishing policies, practices, and procedures for the creation, maintenance, and disposition of electronic information;
- (4) Performing periodic evaluations of electronic information to ensure compliance with applicable laws and regulations; departmental policies, standards, and procedures; and the Privacy Act;
- (5) Providing training on electronic information handling, maintenance, disposition, etc.;
- (6) Acting as liaison with the Department in matters that relate to electronic information; and
- (7) Developing and maintaining a complete and accurate inventory of all electronic information files and data bases in conjunction with the Information Resources Management Division to facilitate disposition.

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- F. The Bureau Information Resources Security Administrator is responsible for establishing appropriate security measures to protect electronic systems from loss, damage, theft, alteration, or misappropriation, and ensuring that electronic information security is included in computer system security plans prepared pursuant to the Computer Security Act of 1987 (40 U.S.C. 759).
- G. The MMS Security Officer is responsible for ensuring secure physical storage facilities for electronic information of a proprietary or Privacy Act nature.
- H. <u>Contractors</u> are responsible for ensuring adequate documentation, applying authorized disposition, and complying with the system owner's established security procedures to prevent unauthorized disclosure and/or alteration of the data contained in the system.
- I. <u>Project Managers</u> (system owners) when planning or upgrading systems will coordinate electronic information system standards and procedures with the Records Manager (see paragraph 8).
- J. <u>Users</u> are responsible for complying with operating procedures established by the Project Manager and operating the system in such a manner as to protect the information from damage, destruction, or alteration.
 - K. Records Officers are responsible for:
 - (1) Scheduling the disposition of electronic information:
- (a) Submit a National Archives Form 14028 to the Records Manager for electronic information not covered in the MMSM 380.2-H; or
- (b) Submit Form MMS-2003 to the Records Manager to schedule the electronic form when the information is scheduled for other media.
- (2) Ensuring the prompt disposal or transfer of electronic information, and
- (3) Monitoring (to include assessments) electronic information practices to ensure compliance with this chapter.
- 7. Standard ADP Electronic Information Format. The Federal Information Processing Standards Publications (FIPS PUBS) guidelines should be used in electronic information creation, storage, and transmission (see Appendix 1 of 382 DM 11).

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- 8. Standards for the Creation, Use, Preservation, and Disposition of Electronic Records.
- A. <u>Life Cycle</u>. In establishing an electronic information system the full life cycle of the data maintained in the system must be considered and the following steps taken:
- (1) Determine in what form(s) the information will be maintained for its life cycle; e.g., paper, microform, magnetic, optical.
- (2) Establish procedures for identifying, cataloging, and labeling information for the life cycle of the information.
 - (3) Identify information users.

B. Creation and Use of Data Files.

- (1) For electronic records systems that produce, use, or store data files, disposition instructions for the data must be incorporated into the system's design.
- (2) Maintain adequate and up-to-date technical documentation for each electronic records system that produces, uses, or stores data files. Minimum documentation required is a narrative description of the system; physical and technical characteristics of the records, including a record layout that describes each field including its name, size, starting or relative position, and a description of the form of the data (such as alphabetic, zoned decimal, packed decimal, or numeric), or a data dictionary or the equivalent information associated with a data base management system including a description of the relationship between data elements in data bases; and any other technical information needed to read or process the records.

C. Creation and Use of Text Documents.

- (1) Electronic records systems that maintain the official file copy of text documents on electronic media must meet the following minimum requirements:
- (a) Provide a method for all authorized users of the system to retrieve desired documents, such as an indexing or text search system;
- (b) Provide an appropriate level of security to ensure integrity of the documents;
- (c) Provide a standard interchange format when necessary to permit the exchange of documents on electronic media

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between computers using different software/operating systems and the conversion or migration of documents on electronic media from one system to another; and

- (d) Provide for the disposition of the documents including, when necessary, the requirements for transferring permanent records to the National Archives in accordance with MMSM 380.2-H.
- (2) Before a document is created electronically on electronic records systems that will maintain the official file copy on electronic media, each document must be identified sufficiently to enable authorized personnel to retrieve, protect, and carry out the disposition of documents in the system. Appropriate identifying information for each document maintained on the electronic media must include office of origin, file code, key words for retrieval, addressee (if any), signator, author, date, authorized disposition (coded or otherwise), and security classification (if applicable). Records maintained in such systems must be correlated with related records on paper, microform, or other media.
- 9. <u>Judicial Use of Electronic Records</u>. Electronic records may be admitted in evidence to Federal courts for use in court proceedings (Federal Rules of Evidence 803(8)) if trustworthiness is established by thoroughly documenting the recordkeeping system's operation and the controls imposed upon it. Offices must implement the following procedures to enhance the legal admissibility of electronic records:
- A. Document that similar kinds of records generated and stored electronically are created by the same processes each time and have a standardized retrieval approach.
- B. Substantiate that security procedures prevent unauthorized addition, modification, or deletion of a record and ensure system protection against such problems as power interruption.
- C. Identify the electronic media on which records are stored throughout their life cycle, the maximum time span that records remain on each storage medium, and the National Archives-approved disposition of all records.
- D. Coordinate all of the above with legal counsel and senior IRM and records management staff.
- 10. <u>Security of Electronic Records</u>. Implement and maintain an effective records security program (see MMSM 375.19) that incorporates the following:

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- A. Ensures that only authorized personnel have access to electronic records.
- B. Provides for backup and recovery of records to protect against information loss.
- C. Ensures that personnel are trained to safeguard sensitive or classified electronic records.
- D. Minimizes the risk of unauthorized alteration or erasure of electronic records.
- E. Ensures that electronic records security is included in computer systems security plans prepared pursuant to MMSM 375.19 and the Computer Security Act of 1987 (40 U.S.C. 759).
- 11. Selection and Maintenance of Electronic Records Storage Media.
- A. Select appropriate media and systems for storing records throughout their life, which meet the following requirements:
 - (1) Permit easy retrieval in a timely fashion;
- (2) Facilitate distinction between record and nonrecord material;
- (3) Retain the records in a usable format until their authorized disposition date; and
- (4) Meet requirements for transferring permanent records to the National Archives when appropriate.
- B. Ensure the following factors are considered before selecting a storage medium or converting from one medium to another:
- (1) The authorized life of the records, as determined during the scheduling process;
 - (2) The maintenance necessary to retain the records;
 - (3) The cost of storing and retrieving the records;
 - (4) The records density;
 - (5) The access time to retrieve stored records;
- (6) The portability of the medium (that is, selecting a medium that will run on equipment offered by multiple manufacturers) and the ability to transfer the information from one medium to another (such as from optical disk to magnetic tape); and

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- (7) The medium meets current applicable Federal Information Processing Standards.
- C. Avoid the use of floppy disks for the exclusive long-term storage of permanent or unscheduled electronic records.
- D. Ensure that all authorized users can identify and retrieve information stored on diskettes, removable disks, or tapes by establishing or adopting procedures for labeling (use of records series numbers is required; see MMSM 380.2-H).
- E. Ensure that information is not lost because of changing technology or deterioration by converting storage media to provide compatibility with the current hardware and software. Before conversion to a different medium the MMS will determine that the authorized disposition of the electronic records can be implemented after conversion. Before preparing tapes for transfer, consult the Records Manager for current requirements.
- F. Backup electronic records on a regular basis to safeguard against the loss of information due to equipment malfunctions or human error. Duplicate copies of permanent or unscheduled records must be maintained in storage areas separate from the location of the records that have been copied.
 - G. Maintenance of magnetic computer tape:
- (1) Test magnetic computer tapes no more than 6 months prior to using them to store electronic records that are unscheduled or scheduled for permanent retention. This test should verify that the tape is free of permanent errors and in compliance with National Institute of Standards and Technology or industry standards.
- (2) Maintain the storage and test areas for computer magnetic tapes containing permanent and unscheduled records at the following temperatures and relative humidities: constant temperature—62 to 68 degrees; constant relative humidity—35 to 45 percent.
- (3) Rewind under controlled tension all tapes containing unscheduled and permanent records every 3 1/2 years.
- (4) Read annually a statistical sample of all reels of magnetic computer tape containing permanent and unscheduled records to identify any loss of data and to discover and correct the causes of data loss. In tape libraries with 1800 or fewer reels, a 20 percent sample or sample size of 50 reels, whichever is larger, should be read. In tape libraries with more than 1800 reels, a sample of 384 reels should be read. Tapes with 10 or more errors should be replaced and, when possible, lost data shall be restored. All other tapes which might have been affected by the same cause

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- (i.e., poor quality tape, high usage, poor environment, improper handling) shall be read and corrected as appropriate.
- (5) Copy permanent or unscheduled data on magnetic tapes before the tapes are 10 years old onto tested and verified new tapes.
- External labels (or the equivalent automated tape management system) for magnetic tapes used to store permanent or unscheduled electronic records must provide unique identification for each reel, including the name of the organizational unit responsible for the data, system title, and security classification if applicable. Additionally, the following information shall be maintained for (but not necessarily attached to) each reel used to store permanent or unscheduled electronic records: file title(s); dates of creation; dates of coverage; the recording density; type of internal labels; volume serial number, if applicable; number of tracks; character code/software dependency; information about block size; and reel sequence number, if the file is part of a multi-reel set. Use of records series number is required for all permanent records (see MMSM 380.2-H). For numeric data files, include record format and logical record length, if applicable; data set names(s) and sequence, if applicable; and number of records for each data set.
- (7) Prohibit smoking and eating in magnetic computer tape storage libraries and test or evaluation areas that contain permanent or unscheduled records.
 - H. Maintenance of direct access storage media.
- (1) Issue written procedures for the care and handling of direct access storage media which draw upon the recommendations of the manufacturers.
- (2) External labels for diskettes or removable disks used when processing or temporarily storing permanent or unscheduled records must include the following information: name of the organizational unit responsible for the records, descriptive title of the contents, dates of creation, security classification, if applicable, and identification of the software and hardware used. Use of records series number is required for all permanent records (see MMSM 380.2-H).
- 12. <u>Retention of Electronic Records</u>. Ensure that electronic records and their documentation are retained as long as specified in MMSM 380.2-H. These retention procedures must include provisions for:

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- A. Scheduling the disposition of all electronic records, as well as related documentation and indexes, applying GRS (particularly GRS 20 or GRS 23) as appropriate by submitting to the Records Manager Form MMS-2003, Records Scheduling Worksheet, or National Archives Form 14028 as appropriate (see 6K). The information in electronic records systems, including those operated for the Government by a contractor must be scheduled as soon as possible but no later than 1 year after implementation of the system.
- B. Transferring a copy of the electronic records and any related documentation and indexes to the National Archives at the time specified in the records disposition schedule. Transfer may take place at an earlier date if convenient for both MMS and the National Archives.
- C. Establishing procedures for regular recopying, reformatting, and other necessary maintenance to ensure the retention and usability of electronic records throughout their authorized life cycle.
- 13. <u>Destruction of Electronic Records</u>. Electronic records may be destroyed only in accordance with MMSM 380.2-H. Ensure the following minimum requirements prior to disposition:
- A. Electronic records scheduled for destruction are disposed of in a manner that ensures protection of any sensitive, proprietary, or national security information.
- B. Magnetic recording media previously used for electronic records containing sensitive, proprietary, or national security information are not reused if the previously recorded information can be compromised in any way by reuse.

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GLOSSARY

<u>Data Base</u> is a set of data, consisting of at least one data file, that is sufficient for a given purpose.

<u>Data Base Management System</u> is a software system used to access and retrieve data stored in a data base.

<u>Data File</u> is related numeric, textual, or graphic information that is organized in a strictly prescribed form and format.

<u>Disposition</u> is the action taken with regard to noncurrent information following appraisal by the National Archives. The actions include transfer to a Federal Records Center for temporary storage, transfer to the National Archives for permanent retention, donation to an eligible depository, reproduction on microfilm, and destruction.

<u>Electronic Form</u> includes information created and/or stored on nonprint media such as magnetic, optical, and microform.

<u>Electronic Record</u> is any information that is recorded in a form that only a computer can process and that satisfies the definition of a Federal record in 44 U.S.C. 3301.

<u>Electronic Records System</u> means any information system that produces, manipulates, or stores Federal records by using a computer.

<u>File</u>, for purpose of this chapter, is a collection of automated information treated as a unit.

<u>Information</u>, for purpose of this chapter, is synonymous with Record. Automated data processing and telecommunications equipment process and transmit information.

<u>Information System</u> is the organized collection, processing, transmission, and dissemination of information in accordance with defined procedures, whether automated or manual.

<u>Life Cycle</u> (creation to disposition) is the planning, creating, collecting, and disposing of information regardless of physical form.

Office of Record is an office designated as the official custodian of records for specified programs, activities, or transactions.

<u>Record</u>, for purpose of this chapter, is an automated logical set of related items (or fields of information) which is organized according to some basic information (for instance a person's name, address, city, State) and which meets the following criteria:

the data has documentary value, is made or received by an Agency of the United States Government under Federal law or in connection with the transaction of public business, and is preserved or is appropriate for preservation by that Agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government, or because of its informational value.

Schedule. See Series.

<u>Series</u> is the number assigned to information after it has been appraised for disposition by the National Archives. Each series identifies a group of identical or related files that are normally used and filed as a unit. All media of a series receive separate disposition instructions. Descriptions of series form a disposition schedule. The MMS disposition schedule is published as part of the Records Management Handbook, MMSM 380.2-H.

<u>System</u> is an interacting assembly of procedures, processes, methods, software, and automated data processing equipment that perform a complex series of data processing operations. Examples: ABACIS and PAY/PERS.

System Documentation is the written description, in detail, of every phase of the programming cycle and specific facts about the program.

<u>Text Documents</u> are narrative or tabular documents, such as letters, memorandums, and reports, in loosely prescribed form and format.

<u>Unscheduled Information</u> consists of files for which no ultimate disposition has been determined nor approval obtained from the National Archives.