TITLE 1 GENERAL GOVERNMENT ADMINISTRATION
CHAPTER 14 MICROPHOTOGRAPHY SYSTEMS
PART 2 MICROPHOTOGRAPHY SYSTEMS, MICROPHOTOGRAPHY STANDARDS

1.14.2.1 ISSUING AGENCY: State Commission of Public Records - State Records Center and Archives
[7-29-96; 1.14.2.1 NMAC - Rn, 1 NMAC 3.2.60.1.1, 12-29-00; A, 06-01-06]

1.14.2.2 SCOPE: All state agencies
[7-29-96; 1.14.2.2 NMAC - Rn, 1 NMAC 3.2.60.1.2, 12-29-00]

1.14.2.3 STATUTORY AUTHORITY: Sections 14-3-2, 14-3-15 and 14-3-17 of the Public Records Act (Chapter 14, Article 3 NMSA 1978) gives the state records administrator review and approval authority over microphotography systems of state agencies, and gives the commission of public records authority to establish microphotography standards. The operation of any microphotography system requires the written approval of the state records administrator, and compliance with the minimum standards established by the commission of public records.
[6-8-74...7-29-96; 1.14.2.3 NMAC - Rn, 1 NMAC 3.2.60.1.3 & A, 12-29-00; A, 06-01-06]

1.14.2.4 DURATION: Permanent
[7-29-96; 1.14.2.4 NMAC - Rn, 1 NMAC 3.2.60.1.4, 12-29-00]

1.14.2.5 EFFECTIVE DATE: July 29, 1996, unless a later date is cited at the end of a section.
[7-29-96; 1.14.2.5 NMAC - Rn, 1 NMAC 3.2.60.1.5 & A, 12-29-00]

1.14.2.6 OBJECTIVE: To establish methods for prescribing the capture, quality and permanence of microfilm and digital images produced by microphotography systems to: ensure that in their content and detail the microfilm and digital images represent accurate reproductions of the original records; that they serve the purposes for which the original records were created; and that they meet the legal acceptance requirements of records produced by information technology systems. See 1.13.70 NMAC, Performance Guidelines For the Legal Acceptance of Public Records Produced by Information Technology Systems.
[6-8-74...7-29-96; 1.14.2.6 NMAC - Rn, 1 NMAC 3.2.60.1.6 & A, 12-29-00; A, 06-01-06; A, 06-30-09]

1.14.2.7 DEFINITIONS:

A. "Agency" means any state agency, department, bureau, board, commission, institution or other organization of the state government, including district courts. See Sections 14-3-2 and 14-3-15 NMSA 1978.

B. "Approved microphotography system" means a microphotography system that has been approved in writing by the administrator under the provisions of Section 14-3-15 NMSA 1978.

C. "CD-ROM mastering process" means the creation of the first recording (the master) in the compact disk-read only memory replication process.

D. "CD-ROM premastering" see premastering.

E. "Compact disk" means read-only optical disk available in formats for audio, data and other information.

F. "Compact disk-read only memory" means optical disk that is created by a mastering process and used for reading.

G. "Compact disk-write once read many" means an optical disk that is written and then available for reading.

H. "Density" means the light-absorbing or light-reflecting characteristics of a photographic image, filter, etc.; or the number of pixels per square inch.

I. "Disposition" means the final action that puts into effect the results of an appraisal decision for a record series (e.g., transfer to archives or destruction).

J. "Document accountability" means the process whereby original documents are compared against the images produced, so that the film ensures the validity and integrity of the images.

K. "Dots per inch" means the measurement of output device resolution and quality, e.g., number of pixels per inch on display device. Measures the number of dots horizontally and vertically.

L. "Enhancement algorithms" means the set of techniques for processing an image so that the result is visually clearer than the original image.

M. "JPEG" means the specific compressed image file format specified by ISO. [See JPEG acronym]

N. "Imaging" means the process of converting human readable media, such as paper or microfilm, into information that can be stored and retrieved electronically.

O. "Master" (noun) means:

(1) in micrographics, the original microform produced from which duplicates or intermediates can be obtained (ISO); and

(2) in electronic imaging, the first recording, one from which duplicates can be obtained.

P. "Master" (verb) means creating the first recording.

Q. "Microphotography" means the transfer of images onto storage media including but not limited to film, tape, disk, or other information storage techniques that meet the Performance Guidelines for Legal Acceptance of Public Records produced by information technology system technologies pursuant to regulations adopted by the commission of public records. See Section 14-3-2 NMSA 1978.

R. "Microphotography program manager" means the person responsible for the microphotography system program in a state agency.

S. "Microphotography system" means all microphotography equipment, services, policies, procedures and supplies that together create, store and reproduce public records.

T. "Open system" means a system that implements sufficient open specifications for interfaces, services, and supporting formats to enable properly engineered image processing applications that can be ported with minimal changes across a wide range of systems; can inter-operate with other applications on local and remote systems; and can interact with users in a manner that facilitates access and maintenance of public records on such systems.

U. "Open system environment" means the comprehensive set of interfaces, services, and supporting formats, plus user aspects, for portability or interoperability of applications and data.

V. "Optical disk" means the medium that will accept and retain information in the form of marks in a recording layer that can be read with an optical beam. See also compact disk-read only memory, rewritable optical disk and write-once read many optical disk.

W. "Pixel" means the smallest element of a display surface that can be independently assigned color or intensity.

X. "Premaster" means the intermediate recording from which a master will be created.

Y. "Premastering" means the conversion to digital code, the addition of error correction codes and the intelligent preprocessing of the data records. It also includes the phase of optical disk production in which machine-readable and bit-stream data are converted to optical disk.

Z. "Records" means information preserved by any technique in any medium, now known, or later developed, that can be recognized by ordinary human sensory capabilities either directly or with the aid of technology.

AA. "Records custodian" means the statutory head of an agency or his designee.

BB. "Resolution" means the ability of a system to record fine detail, or the measure of that fine detail.

CC. "Scanner" means a device that converts a document into binary (digital) code by detecting and measuring the intensity of light reflected from paper or transmitted through microfilm.

DD. "Tag image file format" means the standardized format for storage of digitalized images, which contains a header or tag that defines the exact data structure of the associated image.

EE. "Traditional microfilm" means the production of traditional microfilm in which source documents are photographed utilizing a camera and images are captured on film.

[7-29-96, 1-12-98; 1.14.2.1.7 NMAC - Rn, 1 NMAC 3.2.60.1.7 & A, 12-29-00; A, 04-30-02; A, 06-01-06; A, 06-30-09; A, 07-15-10]

1.14.2.8 ABBREVIATIONS AND ACRONYMS:

A. "AIIM" stands for association for information and image management.

B. "ANSI" stands for american national standards institute.

C. "ARMA" stands for association of records managers and administrators.

D. "CCITT" stands for consultative committee for international telegraphy and telephony.

E. "CD-ROM" stands for compact disk-read only memory.

F. "CD-WORM" stands for compact disk-write once read many.

G. "COM stands for computer output microfilm.

H. "Dmax" stands for density maximum.

I. "Dmin" stands for density minimum.

J. "DPI" stands for dots per inch.
K. "GIF" stands for graphic interchange format.
L. "ISO" stands for international standardization organization.
M. "JPEG" stands for joint photographic experts group.
N. "MS" stands for microphotography standard.
O. "MTBF" stands for mean time between failure.
P. "NISO" stands for national information standards organization.
Q. "NIST" stands for national institute of standards and technology.
R. "SRCA" stands for state records center and archives.
S. "TIFF" stands for tag image file format.
[1.14.2.8 NMAC - N; A, 07-15-03]

1.14.2.9 MICROPHOTOGRAPHY SYSTEM APPROVAL:

A. The state records administrator shall approve all microphotography system plans for microfilm, COM and imaging. Original records shall not be destroyed until an agency has an approved microphotography plan and the state records administrator has approved the destruction (see *1.13.30 NMAC, Destruction of Public Records and Non Records*). Approval of a microphotography system plan shall be for five years, unless the system is modified (see Subsection D of 1.14.2.16 NMAC). Renewal of approval is contingent upon submission of a five year system review or an amended plan.

B. Agencies shall comply with the requirements in this rule for microfilming or digitizing public records to ensure that the informational content of the record is captured and preserved for the life of the record.

C. Agencies shall request in writing the approval of a new, a modified and an existing microphotography system plan not previously approved, including but not limited to microfilm, COM and digital imaging.

(1) Traditional microfilm: microphotography plans for traditional microfilm shall meet all requirements as specified in Sections 9, 10 and 11 of 1.14.2 NMAC.

(2) COM: microphotography plans for computer output microfilm shall meet all requirements as specified in Sections 9, 12, 13 and 14 of 1.14.2 NMAC.

(3) Digital imaging: microphotography plans submitted for digital imaging shall meet all requirements as specified in Sections 9, 14, 15 and 16 of 1.14.2 NMAC.

D. The approval of a microphotography system plan shall be obtained before any source documents are submitted for destruction.
[7-29-96, 1-12-98; 1.14.2.9 NMAC - Rn, 1 NMAC 3.2.60.1.8 & A, 12-29-00; A, 06-30-09; A, 07-15-10]

1.14.2.10 STANDARD FOR MICROFILM: This standard applies to the production of traditional microfilm in which source documents are photographed utilizing a camera and images are captured on film. The measures outlined in this section are required to maintain the integrity of the original records and to ensure that the microfilm produced is an adequate substitute for the original record and serves the purpose for which such records were created.

A. Agencies utilizing a service provider for the filming, processing, duplication or the production of microforms shall have a written agreement in place to provide for compliance with this standard.

B. A microfilm system shall be determined to meet minimum standards if the combined results of the consumables (i.e. film, chemicals, etc.) and microfilm equipment meet the standards developed or approved by the American national standards institute for the production of microfilm (see 1.14.2.17 NMAC). The requirements of the most current revisions of said standard shall prevail unless otherwise specified in this rule.

C. Preparation for microfilming: Materials to be microfilmed require careful analysis and preparation to ensure the creation of quality microfilm that is readily usable and easily understood. Important factors to be considered in determining which record series should be filmed include retention period and volume. Only records in large volume or with long retention periods should normally be considered. Before microfilming, materials must be properly organized and collated.

(1) Records shall be carefully inspected for completeness and the description and retention period of the record verified.

(2) The proper order of the materials shall be determined before microfilming.

(3) Active records shall not be filmed with inactive records.

(4) Documents from different record series may be filmed on a single roll provided retention periods are the same.

D. Microfilm qualifications: Agencies shall produce a *master* negative microfilm and a *working copy*. An agency shall have a re-inspection program and process in place for all master microfilm produced.

(1) Master microfilm shall:

(a) be of a silver gelatin composition;

(b) meet the minimum standards for the production of master microfilm specified in this section for density, resolution, targeting and spacing;

(c) shall be re-filmed if it fails inspection;

(d) be stored off-site (for security purposes) for the full period prescribed by the agency's records retention and disposition schedule.

(2) Working copy microfilm is designated for reference or everyday use in an office and may be of silver halide, diazo, or of a vesicular composition. An agency shall produce a minimum of one working copy of microfilm.

(3) If multiple working copies of security or preservation microfilm are needed, it is recommended that the production of such microfilm conform to a three-generation system as noted in section 7.1 of ANSI/AIIM MS48-1990. Such a system consists of master negative; a second-generation copy of the master negative that serves as a duplicate negative to be used for producing additional copies; and one or more third-generation working copies produced from the second-generation film.

(4) Agencies using microfilm systems that do not produce an original silver gelatin film shall make a silver gelatin duplicate negative that meets this standard before depositing such film for storage at the SRCA.

E. Microfilm targets. All microfilm shall have the following targets to be in compliance with this rule:

(1) Statement of intent and purpose. A statement of intent and purpose shall be filmed at the beginning and end of each roll of film and shall contain the following information:

(a) authority under which microfilming is being done;

(b) name of the agency for which the microfilming is being done;

(c) statement indicating the records microfilmed are in the legal custody of the agency, and that the records were created as part of the normal course of business;

(d) statement certifying the agency is microfilming in accordance with an approved microphotography plan on file with the SRCA;

(e) statement certifying that it is the policy of the agency to microfilm the specified records and that the microfilm is an accurate representation of the original copy which will be maintained as the legal copy of record in lieu of paper, and that the paper records are destroyed after microfilming in accordance with all requirements of the Public Records Act; and

(f) name, title, and signature of records custodian or microphotography program manager.

(2) Resolution target. Each roll of film will contain a photographic image of a standard resolution test card or chart. ISO test chart no. 2 as specified by ANSI/AIIM MS51-1991 (*American National Standard for Microcopying--ISO Test Chart No. 2--Description and Use in Photographic Documentary Reproduction*), must be filmed at the beginning and ending of each roll. These chart images should be used to monitor resolution as filming progresses. The line patterns must be read in each corner and in the center of each chart (or on a diagonal for rotary cameras) and the lowest resolution reading must be posted to the film container and to the guide sheet or other laboratory record. The cause of a substandard resolution must be identified and corrected prior to further production filming. All substandard film shall be corrected before shipping to the SRCA for storage.

(a) Rotary cameras. A minimum resolving power of 2.5 shall be read on the required test chart.

(b) Planetary cameras. A minimum resolving power of 4.0 shall be read on the required test chart.

(c) Resolution readings shall be determined by following the procedures for determining microfilm resolution as set forth in ANSI/AIIM MS23.

(3) Density target. The required background transmission density maximum (Dmax) for source document microfilm is based on filming a target consisting of a blank sheet of 20 lb white bond paper.

(a) Paper records dated prior to 1960, the relative Dmax shall read between .9 and 1.19.

(b) Paper records dated 1960 and after, the relative Dmax shall read between .85 and 1.29.

(c) Density targets shall appear at the beginning and end of each roll.

(d) Density readings shall be measured at the center of the density target.

(e) Density minimum (Dmin). The required base plus fog density (relative Dmin) for unexposed processed microfilms shall not exceed 0.10.

(4) Start of roll target. Start of roll target shall contain the following information:
- **(a)** roll number;
- **(b)** name of agency and office to which the records belong;
- **(c)** record(s) or file(s) being microfilmed;
- **(d)** date of filming;
- **(e)** name of camera operator; and
- **(f)** description of first record image on the roll of film.

(5) End of roll target. End of roll target shall contain the following information:
- **(a)** roll number;
- **(b)** name of agency and office to which the records belong;
- **(c)** record(s) or file(s) being microfilmed;
- **(d)** date of filming and name of camera operator; and
- **(e)** description of last record image on the roll of film.

F. Microfilm image sequence and spacing. The following image sequence and spacing shall be used:

(1) Start of roll:
- **(a)** film leader;
- **(b)** a single statement of intent and purpose;
- **(c)** a single resolution target;
- **(d)** a single density target;
- **(e)** a single start of roll target; and
- **(f)** four spaces.

(2) Record images. Source documents are to be filmed between the start and end of roll targets.

(3) End of roll:
- **(a)** four spaces;
- **(b)** a single end of roll target;
- **(c)** a single density target;
- **(d)** a single resolution target;
- **(e)** a single statement of intent and purpose; and
- **(f)** film trailer.

G. Chemical testing of processed film will be required in order to comply with the standards set forth in ANSI/NAPM IT9.17-1993, ANSI/ISO 417-1993 (*American National Standard for Photography--Determination of Residual Thiosulfate and Other Related Chemicals in Processed Photographic Materials--Methods Using Iodine-Amylose, Methylene Blue and SilverSulfide*). Methylene blue test will be used to meet this requirement.

(1) For records possessing a permanent retention, a methylene blue test shall be conducted on a six inch unexposed clear strip of leader cut from a processed roll of microfilm. The methylene blue test shall be conducted on the microfilm strip within two weeks after the processing of the microfilm.

(2) Systems producing more than 10 rolls per week, shall maintain proof of biweekly test results.

(3) Residual thiosulphate ion shall not exceed 1.4 micrograms per square centimeter as tested by the methylene blue test.

(4) Test results shall be maintained for the retention period of the records on microfilm produced (until film is eligible for destruction) or until the microfilm is regenerated.

(5) Annual proof of methylene blue testing shall be submitted to the state records center and archives by the end of each fiscal year in which microfilm is produced.

H. Splicing and erasures. Roll form master negative microfilm shall have no splicing or erasures between certification statements, unless expungement of a particular image or images is authorized in writing by the custodial agency.

I. Post-film inspection:

(1) Master negative microfilm shall be inspected by state agencies or by vendors filming for agencies. Inspection shall consist of verification of the following:
- **(a)** targets;
- **(b)** indexing;
- **(c)** labeling;
- **(d)** document accountability;
- **(e)** density;
- **(f)** resolution; and
- **(g)** visual observation of major defects and errors.

(2) Agencies shall inspect duplicate film for the following:

(a) major defects and errors;

(b) indexing accuracy;

(c) document accountability; and

(d) legibility.

(3) Microforms failing to pass inspection shall be refilmed.

J. Master microforms stored at the state records center are subject to audit by the SRCA at any time and shall comply with the standards set out in Subsection I of 1.14.2.10 NMAC. In the event densitometer readings by an agency or vendor consistently vary from those of the SRCA, the agency or vendor shall calibrate their densitometers to correspond to readings obtained by densitometers at the SRCA.

K. Microfilm container identification.

(1) All master microfilm roll containers shall contain the following minimum information:

(a) name and address of the custodial agency;

(b) date filmed;

(c) identification of the first and last document on the roll of film;

(d) identification of the inclusive dates of the oldest and the most recent document by month, date and year;

(e) records series names and corresponding records retention and disposition schedule item number;

(f) disposition trigger date (i.e., date file closed, date contract terminated, etc.);

(g) name and address of the entity producing the roll of film; and

(h) roll number.

(2) Master microfilm rolls that do not contain the required information on the label shall be returned to the agency for re-labeling. If SRCA is required to ship the master microfilm rolls back to the agency, the custodial agency shall be responsible for the shipping costs.

L. Indexing requirements. The agency shall maintain an index for the purpose of tracking all microphotography records. The index shall include the following:

(1) agency code;

(2) record series title and corresponding records retention and disposition schedule item number;

(3) retention period;

(4) inclusive dates;

(5) trigger date;

(6) date filmed; and

(7) access restrictions.

M. Destruction of original copy.

(1) Prior to the final destruction of any microfilmed paper records, all requirements of this rule shall be met.

(2) Agencies shall submit a request for destruction which includes the following information:

(a) a statement that the records for destruction have been microfilmed;

(b) that the microfilm has been filmed in accordance to 1.14.2. NMAC microphotography standards;

(c) roll numbers;

(d) record series; and

(e) shall be signed by the records custodian for destruction approval.

[9-8-77, 5-27-79, 1-7-81, 1-13-82, 3-29-92, 4-6-92, 7-29-96, 8-24-96, 1-12-98; 1.14.2.10 NMAC - Rn, 1 NMAC 3.2.60.1.9& A, 12-29-00; A, 04-30-02; A, 07-15-03; A, 06-01-06; A, 06-30-09]

1.14.2.11 MICROFILM SYSTEM PLAN: The microfilm system plan shall address each of the elements in this section:

A. purpose of the system;

B. specific goals of the system including identification of the official copy of record;

C. record series to be microphotographed as identified in the records retention and disposition schedule;

D. system specifications;

E. schema for indexing;

F. disposition of records (source documents) microfilmed;

G. disposition plan for microfilm (masters and working copies) when legal retention has been met;

H. off-site storage location of microfilm masters;

I. system implementation date; and

J. five year review, amendments and modifications.

[1.14.2.11 NMAC - N, 12-29-00; A, 07-15-03; A, 06-01-06]

1.14.2.12 STANDARD FOR COMPUTER OUTPUT MICROFILM (COM): These standards apply to the production of master microfilm from records digitally created (born digital) or imaged (scanned) from paper.

A. State agencies shall utilize a COM system capable of recording faithfully onto microfilm all of the information contained in the digital image. Agencies utilizing a service provider for writing digital images to COM shall have a written agreement in place to provide for compliance with this standard.

B. The following standards for production, testing, and inspection of COM shall be met:

(1) ANSI/AIIM MS1;

(2) ANSI/AIIM MS5;

(3) ANSI/AIIM MS28;

(4) ANSI/AIIM MS39;

(5) ANSI/AIIM MS43; and

(6) ANSI/NAPM IT9.17.

C. Record grouping. Before converting images to COM records shall be properly organized and grouped.

(1) Records shall be carefully inspected for completeness and the description and retention period of the record verified.

(2) The proper order of the materials shall be determined before conversion to COM.

(3) Active records shall not be filmed with inactive records.

(4) Documents from different record series may be filmed on a single roll provided retention periods are the same.

D. Film writer quality control. State agencies shall ensure that the film writer has the correct density/contrast level by using a reference white target file with a range of 0.9 to 1.1.

E. Quality monitoring of images. Quality monitoring of images is controlled at the time of document scanning. See *1.14.2.14 NMAC, standard for imaging*.

F. Resolution standard: A system used to create microfilm from digital images shall have a self-test process to ensure that all of the available pixels are consistently available for recording purposes. The COM unit shall be tested regularly to ensure optimal functionality.

G. Density:

(1) Density of master negative COM shall measure between 0.80 to 1.20.

(2) Required base plus fog density (relative Dmin) for unexposed processed microfilms shall not exceed 0.10.

(3) Background density on positive appearing silver masters shall be no greater than 0.30.

H. Reduction ratios: The selection of a reduction ration is application specific. An agency shall take into account the characteristics of the record, the task the system is designed to perform, and the user requirements to be satisfied when selecting a reduction ratio.

I. Image resolution: Resolution shall be adequate to duplicate all details of the document in order that the COM qualify as a true copy of the original record. Image resolution shall meet standards specified in Subsection G of 1.14.2.14 NMAC.

J. Image formats. Digital images shall be in a standard image format such as Group IV TIFF, BMP or PDF.

K. Blip coding. To effectively organize a roll of COM the use of a multi-level blip coding strategy may be used. Blips are rectangular marks exposed by the film recorder under each page as they are written on the film. These marks can be programmed to appear in different sizes to identify file level, document level, page level, etc. images. Applying this sequence to recorded documents, a large blip designates the first page of a document while small blips indicate supporting pages within the document.

L. Page orientation. Pages can be recorded on microfilm in two ways. In “cine mode” where the text on a page runs perpendicular to the length of the film and in “comic mode” where the text on a page runs parallel to the length of the film. Unless a lower reduction ratio is needed for acceptable image quality, recording letter and legal sized pages in comic mode is preferable. This is accomplished by rotating the images 90º prior to recording or feeding the page “sideways” through the scanner. The advantage of comic mode recording is that more pages can be

written on each roll of film saving storage space and promoting more efficient scanning in the event that the film needs to be used to recover lost image data.

M. Page spacing. Pages need to have sufficient separation to allow a film scanner to reliably differentiate adjacent pages on the film. There should be a minimum separation of 0.06" (1.5mm) between adjacent pages. Pages that touch each other at any point may preclude them from being captured separately by a microfilm scanner. Although maximizing packing density improves scanning efficiency, documents recorded on film should not span rolls.

N. COM targets. All microfilm shall have the following targets to be in compliance with this rule:

(1) Statement of intent and purpose. A statement of intent and purpose shall be filmed at the beginning and end of each roll of film and shall contain the following information:

(a) authority under which microfilming is being done;

(b) name of the agency for which the microfilming is being done;

(c) statement indicating the records microfilmed are in the legal custody of the agency, and that the records were created as part of the normal course of business;

(d) statement certifying the agency is microfilming in accordance with an approved microphotography plan on file with the SRCA;

(e) statement certifying that it is the policy of the agency to microfilm the specified records and that the microfilm is an accurate representation of the original copy which will be maintained as the legal copy of record in lieu of paper, and that the paper records are destroyed after microfilming in accordance with all requirements of the Public Records Act; and

(f) name, title, and signature of records custodian or microphotography program manager.

(2) Resolution test targets. COM produced from either scanned or born digital images shall include manufacturer's self-test targets specified in Subsection F of 1.14.2.12 NMAC.

(3) Density targets. See Subsection G of 1.14.2.12 NMAC.

(4) Start of roll target. Start of roll target shall contain the following information:

(a) roll number;

(b) name of agency and office to which the records belong;

(c) record(s) or file(s) being microfilmed;

(d) date of filming;

(e) name of camera operator; and

(f) description of first record image on the roll of film.

(5) End of roll target. End of roll target shall contain the following information:

(a) roll number;

(b) name of agency and office to which the records belong;

(c) record(s) or file(s) being microfilmed;

(d) date of filming and name of camera operator; and

(e) description of last record image on the roll of film.

O. Microfilm image sequence and spacing. The following image sequence and spacing shall be used:

(1) Start of roll:

(a) film leader;

(b) a single statement of intent and purpose;

(c) a single resolution target;

(d) a single density target;

(e) a single start of roll target; and

(f) four spaces.

(2) Digital or scanned images.

(3) End of roll:

(a) four spaces;

(b) a single end of roll target;

(c) a single density target;

(d) a single resolution target;

(e) a single statement of intent and purpose; and

(f) film trailer.

P. Microfilm qualifications: Agencies shall produce a *master* negative microfilm and a *working copy*. An agency shall have a re-inspection program and process in place for all master microfilm produced.

(1) Master microfilm shall:

(a) be of a wet silver gelatin composition;

(b) meet the minimum standards for the production of master microfilm specified in this section for density, resolution, targeting and spacing;

(c) shall be re-mastered if it fails inspection;

(d) be stored off-site (for security purposes) for the full period prescribed by the agency's records retention and disposition schedule.

(2) Working copy microfilm is designated for reference or everyday use in an office and may be of silver halide, diazo, or of a vesicular composition. An agency shall produce a minimum of one working copy of microfilm.

(3) If multiple working copies of security or preservation microfilm are needed, it is recommended that the production of such microfilm conform to a three-generation system as noted in section 7.1 of ANSI/AIIM MS48-1990. Such a system consists of master negative; a second-generation copy of the master negative that serves as a duplicate negative to be used for producing additional copies; and one or more third-generation working copies produced from the second-generation film.

(4) Agencies using COM systems that do not produce an original silver gelatin film shall make a silver gelatin duplicate negative that meets this standard before depositing such film for storage at the SRCA.

Q. Master COM shall be inspected by state agencies or by vendors filming for agencies. Inspection shall consist of verification of the following:

(1) targets;

(2) indexing;

(3) labeling;

(4) document accountability;

(5) density;

(6) resolution; and

(7) visual observation of major defects and errors.

R. Master COM stored at the SRCA are subject to audit by the SRCA staff at any time and shall comply with the standards set out in Subsection Q of 1.14.2.12 NMAC.

S. Microfilm container identification.

(1) All master microfilm roll containers shall contain the following minimum information:

(a) name and address of the custodial agency;

(b) date converted to COM;

(c) identification of the first and last document on the roll of film;

(d) identification of the inclusive dates of the oldest and the most recent document by month, date and year;

(e) records series names and corresponding records retention and disposition schedule item number;

(f) disposition trigger date (i.e., date file closed, date contract terminated, etc.);

(g) name and address of the entity producing the roll of film; and

(h) roll number.

(2) Master microfilm rolls that do not contain the required information on the label shall be returned to the agency for re-labeling. If SRCA is required to ship the master microfilm rolls back to the agency, the custodial agency shall be responsible for the shipping costs.

T. Indexing requirements. The agency shall maintain an index for the purpose of tracking all microphotography records. The index shall include the following:

(1) agency code;

(2) record series title and corresponding records retention and disposition schedule item number;

(3) retention period;

(4) inclusive dates;

(5) trigger date;

(6) date filmed; and

(7) access restrictions.

U. Destruction of original copy.

(1) Prior to the final destruction of any scanned paper records, all requirements of this rule shall be met.

(2) Agencies shall submit a request for destruction which includes the following information:

(a) a statement that the records for destruction have been scanned and converted to COM;

(b) that the microfilm has been filmed in accordance to 1.14.2. NMAC microphotography standards;

(c) roll numbers;

(d) record series; and

(e) shall be signed by the records custodian for destruction approval.

V. Expungement. An agency required to perform expungement of COM shall create and maintain an expungement certificate that details the reason for the expungement, the authority to expunge, the date of the original filming and the date of the expungement. The expungement certification shall indicate that the original and all known copies have been expunged.

[11-16-82, 12-20-88, 1-19-89, 3-29-92, 7-29-92, 8-24-96; 1.14.2.12 NMAC - Rn, 1 NMAC 3.2.60.1.10 & A, 12-29-00; A, 04-30-02; A, 07-15-03; A, 06-01-06; A, 06-30-09; A, 07-15-10]

1.14.2.13 COM SYSTEM PLAN: A COM plan shall be submitted together with an imaging plan for approval by the state records administrator (see *1.14.2.16 NMAC, imaging system plan.)* Agencies with an approved imaging plan on file with the SRCA shall submit the COM plan as an addendum to the imaging plan. The COM system plan shall address each of the elements in this section.

A. purpose of the system;

B. specific goals of the system including the identification of the official copy of record;

C. record series affected as identified in the records retention and disposition schedule;

D. system specifications;

E. schema for indexing;

F. disposition of records (source documents) microfilmed;

G. disposition plan for COM (masters and working copies) when legal retention has been met;

H. off-site storage location of COM masters and re-inspection program and process;

I. system implementation date; and

J. statement certifying requirements specified in 1.14.2.12 NMAC s*tandard for computer output microfilm(COM)* have been implemented by the agency.

[1.14.2.13 NMAC - N, 12-29-00; A, 07-15-03; A, 06/01/06; A, 06-30-09; A, 07-15-10]

1.14.2.14 STANDARD FOR IMAGING: This section is limited in scope to the conversion of documents to digitized images suitable for storage on optical, magnetic media, or converted to COM. The standards listed in this section are intended to maintain the integrity of the original record and to ensure that the image produced is an adequate substitute for the original record and serves the purpose for which such record was created or maintained.

A. All state agencies shall submit an imaging system plan to the state records administrator for approval prior to implementing a digital imaging system for the conversion of paper documents to a digital format. The imaging plan shall address all of the requirements as specified in 1.14.2.14 NMAC.

B. The imaging system shall be an open system. Variants from an open system, such as proprietary hardware, software or formats, shall require justification.

C. Media life expectancy issues.

(1) Life expectancy rating of any media to be employed by an imaging system used for keeping of public records shall correspond to, and not be less than, the retention period of the records, unless otherwise approved.

(2) Where the life expectancy of media is shorter than retention periods of records imaged, migration shall be addressed as a part of the submitted plan for approval. The migration plan shall provide for review of the hardware and software at least every five years. Where it has been determined that the media are not readable by current off-the-shelf equipment, the agency shall provide for migration to current, generally accessible media. This includes the accessibility of the index as well as accessibility of documents.

(3) Digital images converted to COM shall meet all of the requirements specified in 1.14.2.12 NMAC.

D. The agency shall verify completeness of image capture. Verification shall be completed at point of capture and before the mastering of an optical or magnetic disk and conversion to COM. Inspection of the images shall verify the following:

(1) image filename;

(2) aproved file format as defined in Subsection H of 1.14.2.14 NMAC;

(3) 300 DPI for each image type;

(4) image quality; and

(5) indexing terms correspond to appropriate image.

E. The agency shall test disks for readability. During production each disk shall be tested for readability. In addition, every year a representative sample of stored disks shall be tested in order to early detect any deterioration.

F. Based upon the value of the records being imaged, the agency shall provide adequate system security and audit functions in accordance with the Performance Guidelines for the Legal Acceptance of Public Records, 1.13.70 NMAC.

G. Scanned images shall meet the following standards.

(1) Scanning resolution shall be 300 DPI optical minimum, for text.

(2) Photographic records and other halftone records shall have a scanning resolution at least equal to the original.

(3) Resolution shall be adequate to duplicate all details of each document in order for that document to qualify as a true copy. Engineering, surveying and other records, the usage of which requires precise measurement, shall be imaged at a sufficiently high resolution to provide for that measurement.

(4) Digitized images shall be legible for all purposes for which the original records might be used. All characters in digitized images shall be clearly formed and fully recognizable without regard to their surrounding contexts.

H. Image and media formats.

(1) Images shall be in a standard image format such as Group IV TIFF, PDF or BMP. Compression of images for storage is acceptable if the output resolution requirements for use are met. GIF and JPEG are acceptable compressed formats. Plain black and white "two level" images shall not be converted to JPEG; at least 16 gray levels are necessary before JPEG is a useful gray scale image.

(2) Where optical media is used, file and directory structures shall be compliant with ISO 9660 - High Sierra Level 1 - eight dot three file naming, limited nested subdirectories. Any variance shall be justified.

(3) Where optical media are used for permanent records storage, they shall be of the highest quality available. Any variance shall be justified.

I. Labeling requirements for all master security optical media stored at the SRCA.

(1) All master optical disc containers shall contain at a minimum the following information:

(a) name and address of the custodial agency;

(b) date mastered;

(c) identification of the first and last document on the disc;

(d) identification of the inclusive dates of the oldest and the most recent document by month, date and year;

(e) records series names and corresponding records retention and disposition schedule item number;

(f) disposition trigger dates (i.e., date file closed, date contract terminated, etc.);

(g) name and address of the entity producing the disc; and

(h) disc or other identification number.

(2) Master security optical media that do not contain the required information on the label shall be returned to the agency for re-labeling. If SRCA is required to ship the master optical media back to the agency, the custodial agency shall be responsible for the shipping costs.

(3) For optical media not stored at the SRCA the labeling shall consist of:

(a) agency name;

(b) date mastered;

(c) record series name and number;

(d) inclusive dates of the records series; and

(e) the overall content of the optical disk, independent of any index that may be contained on the disk itself.

J. The agency shall maintain an index for the purpose of tracking all microphotography records. The index shall include the following:

(1) agency code;

(2) record series title and corresponding records retention and disposition schedule item number;

(3) retention period;

(4) inclusive dates;

(5) trigger date;

(6) date filmed; and

(7) access restrictions.

K. Documents from different record series may be imaged on a single medium (magnetic disk, optical disk, etc.) provided destruction dates coincide, or the disposition plan provides for the maintenance of the media for the longest retention period of any record on the media.

L. Page counts in physical files shall be verified in the scanned versions and certified as complete prior to mastering or writing the optical disk. The certification of completeness shall be kept on file by the agency.

M. Expungement. An agency shall perform expungement of images in accordance with statutory requirements or court order.

(1) An agency shall create and maintain an expungement certificate that details the reason for the expungement, the authority to expunge, the date of the original scanning and the date of the expungement. The expungement certification shall indicate that the original and all known copies have been expunged. The potential for expungement orders shall be addressed in the imaging plan.

(2) When expungement of records is necessary, the plan shall provide for the remastering of all media that have been modified.

(3) When expungement of records is necessary, the plan shall provide for all index records and related image files to be obliterated from the database and the image file storage, and from all backup media.

N. Preservation: Preservation requirements are based on the retention period of the digital image.

(1) Digital records that have an established life cycle of fifteen years or less and are declared the official copy of record may be stored electronically.

(2) Digital records that have a long-term retention requirement of sixteen to fifty years shall meet the requirements specified in Subsection C of 1.14.2.14 NMAC. If converted to COM the requirements of Subsection C do not apply.

(3) Digital records that have a retention period greater than fifty years or have a permanent retention shall be converted to COM. For COM requirements see 1.14.2.11 NMAC and 1.14.2.12 NMAC.

O. Imaging systems shall meet the imaging standards developed by ANSI and enumerated in section 1.14.2.17 NMAC. If not, adequate justification must be provided. The requirements of the most current revision of the standard shall prevail, unless otherwise specified in this rule.

P. New imaging system applications shall be backward compatible with pre-existing applications, or, where they are not, a migration plan for pre-existing images and indexes shall be provided, or dual systems shall be run until the records retention periods for all pre-existing imaged records have expired.

[7-29-96, 8-24-96, 1-12-98; 1.14.2.14 NMAC - Rn, 1 NMAC 3.2.60.1.11 & A, 12-29-00; A, 07-15-03; A, 06-01-06; A, 06-30-09; A, 07-15-10]

1.14.2.15 IMAGING SYSTEM MANAGEMENT: To ensure the reliability and accuracy of image systems and processes, agencies shall specifically address each of these management structure components.

A. Policies and procedures shall be implemented that define proper management, maintenance and use of the system. Policies and procedures shall provide detailed information on the imaged records throughout their entire life cycle. Such procedures shall include but are not limited to:

(1) the steps leading up to the conversion of records;

(2) the methods for storage of the records;

(3) plans for disaster recovery, including plans for redressing tampering and deterioration of records;

(4) steps involved in the retrieval and disposition of records;

(5) staff roles and responsibilities;

(6) staff maintenance of operation logs and run schedules to document reliability of the system;

(7) monitoring, controlling, and verifying the accuracy and integrity of imaged records;

(8) designing, implementing, and documenting quality control;

(9) attesting to the accuracy and validity of records at the time they are created or updated;

(10) developing and following systematic steps for data entry;

(11) retaining any specially written program used to extract data from a system and producing labels for media containing electronic records that identify the exact title, creating program unit, date, purpose, source, and destination of records;

(12) documenting any problems and resolution of problems including documenting any delays in data entry by keeping records of the date the original source documents were created and the date the data were entered, and keep records of any unusual delay in producing output;

(13) documenting that procedures are being followed;

(14) maintaining records for inspection and audit for the full retention period required by law; and

(15) documenting the methods for ensuring that the imaged and converted records shall be accessible, useable, and understandable.

B. Management shall plan for the provision and maintenance of adequate facilities that ensure the converted and stored records shall be accessible, useable and understandable.

C. Management shall plan for document and test procedures for scanning and indexing records prior to implementation.

D. Management shall provide for formal instruction and training in system operation and maintenance, including image input, process and retrieval. Training and support programs shall be put in place to ensure that staff understands the policies and procedures.

E. Management shall establish controls that monitor the accuracy and authenticity of data, the continued reliability of hardware and software, and the integrity and security of the system. [see 1.13.70 NMAC Performance Guidelines for the Legal Acceptance of Public Records]

F. Management shall establish controls that provide for the testing of procedures to ensure that the procedures accomplish their purpose.

G. Management shall ensure that the proposed imaging system provides adequate information to fulfill the requirements of state and federal law.

H. Management shall ensure that the imaging process or system can be shown to be trustworthy in producing accurate results.

I. Management shall ensure that the system creates or compiles records in the normal course of business to support the described function or activity.

J. Management shall ensure that the system preserves information over time in identical or functionally equivalent form to the original information.

K. Management shall ensure that records are kept in an understandable form and insure that they can be made accessible within a reasonable amount of time, and within the time established by law through the creation and implementation of a re-inspection process or program.

L. Management shall ensure that the records are organized in a manner that facilitates retrieval.

M. Management shall determine if special equipment has to be provided to display the records or to print copies of them.

[1.14.2.15 NMAC - N, 12-29-00; A, 06-01-06]

1.14.2.16 IMAGING SYSTEM PLAN. The imaging system plan submitted to the administrator for approval shall address all the items in this section.

A. System description.

(1) The general purpose of the system including the identification of the official copy of record.

(2) The specific goals of system.

(3) The affected records series including record series name, records retention and disposition schedule number, retention period and valuation assessment.

(4) The technical description of the system, including:

(a) for hardware, the technical specifications for servers including, but not limited to, storage capacity, CPU(s), memory, redundancy, connectivity, related in put and out put devices such as scanner types (flatbed, planetary, etc.) as well as workstation configuration, and printers. For software, operating system and version, back up application and scheme, primary imaging application and version, including, but not limited to, data structure, indices, content, data dictionaries, enhancement algorithms, and compression techniques; and date of installation or proposed installation, upgrades, replacements, and conversions;

(b) system documentation, including, but not limited to, database entity relationship diagrams, general system architecture, network topology and protocols; security devices including bio-metrics;

(c) storage media master, including the off-site storage location of digital master(s), type and longevity such as MTBF;

(d) storage media working copy;

(e) backup process with data restoration and system recovery plan; and

(f) re-inspection plan and process.

(5) System security specifications including but not limited to, audit trails, intrusion detection, and disaster recovery.

(6) Plan for public access and finding aids.

(7) System's expected implementation date.

(8) System's expected life span.

B. Management control. The plan shall provide a description of management policies and procedures required by 1.14.2.15 NMAC, including but not limited to operating procedures, including methods for scanning or entering data; revising, updating, or expunging records; indexing; backing up disks, tapes, etc.; testing the readability of records; applying safeguards to prevent tampering and unauthorized access to protected information; and carrying out the disposition of original records.

C. Disposition of records.

(1) For disposition of original records created from 1950 to present, refer to 1.13.30 NMAC Destruction of Public Records and Non-Records.

(2) Original records of the state from 1912 to 1950, the American territorial, the Mexican Republic, and the Spanish colonial periods shall be transferred to the SRCA after the imaging and verification process is complete.

(3) For disposition of imaged records (masters and working copies), whose legal retention has been met, refer to 1.13.30 NMAC Destruction of Public Records and Non-Records.

D. Five year review, amendments and modifications.

(1) The agency shall submit to the administrator a review of their existing imaging system at least every five years. Included in the review shall be all of the management requirements of 1.14.2.15 NMAC.

(2) Prior to mastering any disks under a modified system an agency shall receive approval of a amended imaging systems plan. When an agency makes modifications to an existing imaging system, such modifications shall be incorporated into an amended plan which shall be submitted to the administrator for approval. Examples of modifications include, but are not limited to, expansion of records series being imaged, enhancement to hardware, modification to software, change in media, and changes in procedure. No records shall be destroyed that were imaged under a modified system until the amended plan has been approved.

[1.14.2.16 NMAC - N, 12-29-00; A, 07-15-03; A, 06-01-06]

1.14.2.17 ADDITIONAL MICROPHOTOGRAPHY STANDARDS. In addition to those non-SRCA standards already incorporated into this rule, it is recommended that agencies employing or anticipating the use of a microphotography system refer to and consider the following national or international standards:

A. ANSI/AIIM MS1-1996 Recommended Practice for Alphanumeric Computer Output Microforms - Operational Practices for Inspection and Quality Control: This recommended practice describes operational and quality control guidelines for alpha-numeric computer output microfilm (COM) recorders and microforms using black & white film as well as duplicates made from such films.

B. ANSI/AIIM MS5-1992 Micrographic Microfiche: This standard applies to microfiche produced as a result of source document and computer-output microfilming.

C. ANSI/AIIM MS6-1993 (R1999) Microfilm Package Labeling: This standard outlines the required and optional information that should be placed on unexposed photographic material packaging.

D. ANSI/AIIM MS14-1996 Specifications for 16 and 35 mm Roll Microfilm: This standard applies to 16mm and 35mm roll microfilm produced as a result of source document and computer output microfilming.

E. ANSI/AIIM MS17-1992 Micrographics -- Rotary (Flow) Microfilm Camera Test Chart and Test Target Descriptions and Use: This standard determines the optical performance of rotary microfilm cameras by using test chart outlined in this standard.

F. ANSI/AIIM MS18-1992 Splices for Imaged Film -- Dimensions and Operational Constraints: This standard covers the requirements for splicing processed microfilm and leaders and trailers independent of film width or type of base support.

G. ANSI/AIIM MS19-1993 Recommended Practice for Identification of Microforms: This document provides methods for identifying the contents of microforms.

H. ANSI/AIIM MS23-1998 Practice for Operational Procedures/Inspection and Quality Control of First-Generation Silver-Microfilm of Documents: This document discusses equipment, supplies, and recommended practices necessary to establish and operate a satisfactory micrographics program.

I. ANSI/AIIM MS24-1996 Test Target for Use in Micro recording Engineering Graphics on 35mm Microfilm: This standard specifies the minimum test target elements, their composition and other criteria which is utilized by a 35mm planetary microfilm camera when micro recording engineering drawings.

J. ANSI/AIIM MS26-1990 35mm Planetary Cameras (top light) -- Procedures for Determining Illumination Uniformity of Microfilming Engineering Drawings: This standard specifies the minimum test target elements and their criteria used in determining the uniformity of illumination on the copy board of a 35mm planetary camera.

K. ANSI/AIIM MS35-1990 Requirements and Characteristics of Original Black and White Documents That May Be Microfilmed: This standard practice describes the essential requirements and characteristics for the creation of documents that will facilitate microfilming.

L. ANSI/AIIM MS36-1990 Reader-Printers for Transparent Microforms-Performance Characteristics: This standard specifies the essential performance to view and make hardcopies from roll microfilm.

M. ANSI/AIIM MS38-1995 Recommended Practices for the Micro recording of Engineering Graphics -- Computer Output Microfilm: Specifies the procedures, dimensions, and quality values governing the micro recording of engineering documentation with a 35mm computer-output microfilmer (COM).

N. ANSI/AIIM MS39-1987 Information and Image Management - Operational Procedures, Quality Control and Inspection of Graphic Computer Output Microforms: This document describes operational and quality control guidelines for graphic (COM) recorders and microforms using black and white film and duplicates made from such films.

O. ANSI/AIIM MS42-1989 Recommended Practice for the Expungement, Deletion, Correction or Amendment of Records on Microforms: This recommended practice applies to the removal of images from microforms when document expungement is ordered.

P. ANSI/AIIM MS43-1998 Recommended Practice for Operational Procedures/Inspection and Quality Control of Duplicate Microforms of Documents and From COM: This document provides guidelines for the production of duplicate microforms.

Q. ANSI/AIIM MS44-1988 (R1993) Recommended Practice for Quality Control of Image Scanners: This practice provides procedures for the ongoing control of quality within a digital document image management system.

R. ANSI/AIIM MS45-1990 Recommended Practice for Inspection of Stored Silver Gelatin Microforms for Evidence of Deterioration: This practice applies to all forms of silver-gelatin microfilm whether in roll, aperture card, jacket or microfiche format.

S. ANSI/AIIM MS48-1999 Recommended Practice for Microfilming Public Records on Silver Halide Film: This practice covers original first-generation microforms including rolls, microfiche, aperture cards, and jacket film.

T. ANSI/AIIM MS51-1991 Micrographics -- ISO Resolution Test Chart No.2 Description and Use: This standard specifies a method of determining resolution by measuring the minimum size of detail recognizable in processed microform.

U. ANSI/AIIM MS52-1991 Recommended Practice for the Requirements and Characteristics of Documents Intended for Optical Scanning: This standard describes the physical characteristics of paper documents that facilitate black and white optical scanning.

V. ANSI/AIIM MS61 - 1996 Application Programming Interface (API) for Scanners in Document Imaging Systems.

W. ANSI/AIIM MS62-1999 Recommended Practice for COM Records Systems Having an Internal Electronic Forms Generating System: This standard provides operational practices for inspection and quality control.

X. ANSI/AIIM MS111-1994 Recommended Practice for Microfilming Printed Newspapers on 35mm Roll Microfilm: The purpose of this practice is to establish consistent formats and criteria for microfilming printed newspapers.

Y. ANSI/NAPM IT9.1-1996 Imaging Materials - Processed-- Silver -- Gelatin Type - Black and White Film Specifications for Stability: Specifies the manufacturing and processing requirements for silver-gelatin film.

Z. ANSI/PIMA IT9.2-1998 Imaging Media -- Photographic Processed Films, Plates, and Papers Filing Enclosures and Storage Containers: This standard sets forth the principal physical and chemical requirements for filing enclosures and containers designed for storing processed films, plates, and papers in sheet form.

AA. ANSI/NAPM IT9.6 1991 (R1996) Photographic Films -- Specifications for Safety Film: This international standard provides specifications and test procedures for establishing the safety of photographic films with respect to hazards from fire.

BB. ANSI/NAPM IT9.7 1993 Photography - Photographic Films and Papers Wedge Test for Brittleness: This standard specifies a method for determining and expressing quantitatively the brittleness of photographic film. It is applicable to film with or without a gelatin backing and may also be applied to either raw or processed film, although the brittleness of a particular film may be quite different after processing than it was before processing. This is a revision of PH1.31-1973.

CC. ANSI/PIMA-IT9.11 1998 Imaging Media -- Processed Safety Photographic Film Storage: The recommendations contained in this standard deal with the storage conditions, storage facilities, and handling and inspection procedures for processed safety photographic film in roll, strip, card, or sheet form, regardless of size.

DD. ANSI/NAPM IT9.14 1992 (R1997) Imaging Media -- (Photographic film and papers) -- Method for Determining the Resistance of Photographic Emulsions to Wet Abrasion: This standard, a revision and redesignation of ANSI/NAPM IT11 1993, establishes a laboratory test method for determining the resistance of photographic emulsion or gelatin backing to abrasion damage during processing.

EE. ANSI/NAPM IT9.15-1993 Imaging Media -- Photography -- The Effectiveness of Chemical Conversion of Silver Images Against Oxidation -- Method for Measuring: This standard describes methods for evaluating the effectiveness of chemical conversion treatment intended to increase the resistance of wet processed silver images to oxidation.

FF. ANSI/NAPM IT9.17-1993, ANSI/ISO 417-1993 Micrographics - Photography --Determination of Residual Thiosulfate and Other Related Chemicals in Processed Photographic Materials--Methods Using Iodine-Amylose, Methylene Blue and SilverSulfide.

GG. ANSI/NAPM IT9.21 1996 Life Expectancy of Compact Disks (CD-ROM): This standard provides a method for estimating the life expectancy of compact disks, based on the effects of temperature and relative humidity.

HH. ANSI/PIMA IT9.26 1997 Imaging Materials - Life Expectancy of Magneto-Optic (MO) Disks: This standard provides a method for estimating the life expectancy of magneto-optic disks, based on the effects of temperature and relative humidity.

II. ISO/IEC 1544:2001 Information Technology - Digital compression and coding of continuous-tone still images: Standard for JPEG 2000.

JJ. Compuserve, Inc. 1990 GIF Graphics Interchange Format (tm) - A standard defining a mechanism for the storage and transmission of raster-based graphics information, version 89a.

KK. ISO/IEC 10918-1:1994 Information technology - Digital compression and coding of continuous-tone still images: Requirements and guidelines. This is the basic JPEG standard.

LL. ISO/IEC 10918-2:1995 Information technology - Digital compression and coding of continuous-tone still images: Compliance testing. This provides testing requirements for JPEG formats.

MM. ISO/IEC 10918-3:1997 Information technology - Digital compression and coding of continuous-tone still images: Extensions. This standard provides for extensions on the basic JPEG standard.

NN. ISO/IEC 10918-3:1997/Amd 1:1999 Provisions to allow registration of new compression types and versions in the SPIFF header. This is an extension of the basic JPEG standard.

OO. ISO/IEC 10918-4:1999 Information technology - Digital compression and coding of continuous-tone still images: Registration of JPEG profiles, SPIFF profiles, SPIFF tags, SPIFF colour spaces, APPn markers, SPIFF compression types and Registration Authorities (REGAUT)

PP. ISO 9660:1988 Information Processing - Volume and File Structure of CD-ROM for Information Interchange.

QQ. ISO 9848:1993 Photography -- Source Document Microfilms -- Determination of ISO Speed and ISO Average Gradient: This international standard ANSI/NAPM specifies a method for determining the ISO speed and ISO average IT2.51-1993 gradient of black-and-white camera negative photographic films used for first generation microfilming of source document at exposure times typically found with tungsten sources, including any handwritten or printed alphanumeric and line documents such as books, periodicals, business correspondence, and engineering drawings.

RR. ISO 12639:1998 Graphic Technology - Prepress Digital Data Exchange - Tag Image File Format For Imaging Technology.

[3-29-92, 7-29-96; 1.14.2.17 NMAC - Rn, 1 NMAC 3.2.60.1.12 & A, 12-29-00; A, 06-30-09]

HISTORY OF 1.14.2 NMAC:

1.14.2 NMAC Renumbers and Replaces History of Repealed Material 1 NMAC 3.2.60.1

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SRC Rule 77-1, State Records Center and Archives Microphotography Standards Forms and Operating Procedures, 8-9-77.

SRC Rule 77-2, State Records Center and Archives Microphotography Standards, 8-31-77.

SRC Rule 79-7, State Records Center and Archives, Microphotography Standards, 4-26-79.
SRC Rule 79-6, State Records Center and Archives Microphotography Standards, 4-27-79.
SRC Rule 80-11, Microphotography Standards, 12-8-80.
SRC Rule 80-12, Microphotography Standards Forms and Operating Procedures, 12-8-80.
SRC Rule 82-6, Microphotography Standards, 12-14-81.
SRC Rule 82-25, Microphotography Standards for Computer Output Microfilm, 11-16-82.
SRC Rule 88-5, Microphotography Standards for Computer Output Microfilm, 12-20-88.
SRC Rule 92-03, Microphotography Standards, 2-28-92.
SRC Rule 92-04, Microphotography Standards Forms and Operating Procedures, 2-28-92.