§ 1230.16

- (ii) COM. Computer output microforms (COM) must meet the requirements of ANSI/AIIM MS1-1996.
- (2) Background density of images. The background ISO standard visual diffuse transmission density on microforms must be appropriate to the type of documents being filmed. The procedure for density measurement is described in
- ANSI/AIIM MS23-1998. The densitometer must meet with ANSI/NAPM IT2.18-1996, for spectral conditions and ANSI/NAPM IT2.19-1994, for geometric conditions for transmission density.
- (i) Recommended visual diffuse transmission background densities for images of documents are as follows:

Classification	Description of document	Background density
Group 1	High-quality, high contrast printed book, periodicals, and black typing.	1.3–1.5
Group 2	Fine-line originals, black opaque pencil writing, and documents with small high contrast printing.	1.15–1.4
Group 3	Pencil and ink drawings, faded printing, and very small printing, such as footnotes at the bottom of a printed page.	1.0–1.2
Group 4	Low-contrast manuscripts and drawing, graph paper with pale, fine-colored lines; letters typed with a worn ribbon; and poorly printed, faint documents.	0.8–1.0
Group 5	Poor-contrast documents (special exception).	0.7-0.85

(ii) Recommended visual diffuse transmission densities for computer generated images are as follows:

Film Type	Process	Density Measurement Method	Min. Dmax ¹	Max. Dmin ¹	Minimum Density Difference
Silver gelatin	Conventional	Printing or dif- fuse	0.75	0.15	0.60
Silver gelatin	Full reversal	Printing	1.50	0.20	1.30

 $^1\!\text{Character}$ or line density, measured with a microdensitometer or by comparing the film under a microscope with an image of a known density.

- (3) Base plus fog density of films. The base plus fog density of unexposed, processed films must not exceed 0.10. When a tinted base film is used, the density will be increased. The difference must be added to the values given in the tables in paragraph (d)(2) of this section.
- (4) Line or stroke width. Due to optical limitations in most photographic systems, film images of thin lines appearing in the original document will tend to fill in as a function of their width and density. Therefore, as the reduction ratio of a given system is increased, reduce the background density

as needed to ensure that the copies will be legible.

§ 1230.16 What are the film and image requirements for temporary records, duplicates, and user copies?

- (a) Temporary records with a retention period over 99 years. Follow the film and image requirements in §1230.14.
- (b) Temporary records to be kept for less than 100 years. NARA does not require the use of specific standards. Select a film stock that meets agency needs and ensures the preservation of the microforms for their full retention period. Consult appropriate ANSI standards, available as noted in §1230.3, or

manufacturer's instructions for processing microfilm of these temporary records. Follow the manufacturer's recommendations for production and maintenance of temporary microfilm to ensure that the image is accessible and usable for the entire retention period.

Subpart D—Storage, Use and Disposition Standards for Microform Records

§ 1230.20 How should microform records be stored?

- (a) Permanent and unscheduled records. Store permanent and unscheduled microform records under the extended term storage conditions specified in ISO 18911:2000 and ANSI/PIMA IT9.2–1998, except that the relative humidity of the storage area must be a constant 35 percent RH, plus or minus 5 percent. Do not store non-silver copies of microforms in the same storage area as silver gelatin originals or duplicate copies.
- (b) Temporary records. Store temporary microform records under conditions that will ensure their preservation for their full retention period. Agencies may consult Life Expectance (LE) guidelines in ANSI/AIIM standards (see §1230.3 for availability) for measures that can be used to meet retention requirements.

§ 1230.22 What are NARA inspection requirements for permanent and unscheduled microform records?

- (a) Agencies must inspect, or arrange to pay a contractor or NARA to inspect the following categories of microform records stored at the agency, at a commercial records storage facility, or at a NARA records center following the inspection requirements in paragraph (b) of this section:
- (1) Master films of permanent records microfilmed in order to dispose of the original records;
- (2) Master films of permanent records originally created on microfilm;
- (3) Other master films scheduled for transfer to the National Archives; and (4) Master films of unscheduled

records

(b) The films listed in paragraph (a) of this section must be inspected ini-

tially in accordance with ANSI/AIIM MS45—1990. All films must be inspected when they are 2 years old. After the initial 2-year inspection, unless there is a catastrophic event, the films must be inspected as follows until legal custody is transferred to the National Archives and Records Administration:

- (1) For microfilm that is/was produced after 1990, inspect the microfilm every 5 years.
- (2) For microfilm that was produced prior to 1990, inspect the microfilm every 2 years.
- (c) To facilitate inspection, the agency must maintain an inventory of microfilm listing each microform series/publication by production date, producer, processor, format, and results of previous inspections.
- (d) The elements of the inspection shall consist of:
- (1) An inspection for aging blemishes following ANSI/AIIM MS45-1990;
 - (2) A rereading of resolution targets;
 - (3) A remeasurement of density; and
- (4) A certification of the environmental conditions under which the microforms are stored, as specified in §1230.20(a).
- (e) The agency must prepare an inspection report, and send a copy to NARA in accordance with \$1230.28(b). The inspection report must contain:
- (1) A summary of the inspection findings, including:
- (i) A list of batches by year that includes the identification numbers of microfilm rolls and microfiche in each batch;
- (ii) The quantity of microforms inspected:
- (iii) An assessment of the overall condition of the microforms:
- (iv) A summary of any defects discovered, e.g., redox blemishes or base deformation; and
- (v) A summary of corrective action taken.
- (2) A detailed inspection log created during the inspection that contains the following information:
- (i) A complete description of all records inspected (title; roll or fiche number or other unique identifier for each unit of film inspected; security classification, if any; and inclusive dates, names, or other data identifying the records on the unit of film);