

## PC2009: REGULATIONS ON USING PDF/A

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#### 1: Scope

PC2009 shall apply to all records defined as public records by M.G.L. c. 4, s.7, clause 26, M.G.L. c. 66. The purpose of PC2009 is to ensure that scanned copies of public records have a life expectancy equal to or greater than the retention period assigned to the original record and to be a legal substitute for original paper documents.

The minimum standards set out in PC2009 shall be adhered to in all scanning applications for records the retention of which has been designated as more than 10 years by the Records Conservation Board for the records of the Commonwealth and by the Supervisor of Public Records for the records of counties, cities and towns, and to all records for which retention periods have not been assigned. No records shall be destroyed after PDF/A conversion, without the written permission of the Records Conservation Board or the Supervisor of Public Records, as appropriate.

PC2009 shall apply to all in-house and off-site preparations of such records, as well as to work contracted with professional scanning service bureaus. It is the responsibility of the contracting agency to inform the professional scanning service bureau of the requirements of PC2009.

It is recommended that records with a retention period of more than 10 years be converted to PDF/A, and written to Gold Preservation DVD's in such a manner as required herein for long-term records. However, for economic reasons and for certain systems applications, other DVD types may be better suited for PDF/A containing short-term records; care should be taken that these file types are used and processed so as to provide a life expectancy equal to or greater than the retention period of the record. All scanning and processing shall be in accordance with manufacturers' specifications and all applicable ANSI and ISO standards.

#### 2: Incorporation by Reference

The following standards of the National Archives and Records Administration (NARA), Association for Information and Image Management (AIIM), and the International Organization for Standardization (ISO) contain provisions that, by reference in this text, constitute provisions of PC2009. These standards are subject to revision. Where a standard has been revised, the most current revision shall apply.

*ISO 19005-1:2005 - Document management -- Electronic document file format for long-term preservation*

*AIIM - PDF/A Compliant Products List*

<http://www.aiim.org/standards/article.aspx?ID=33749>

NARA - RECORDS IN PORTABLE DOCUMENT FORMAT (PDF)

<http://www.archives.gov/records-mgmt/initiatives/pdf-records.html>

### 3: Definitions

Definitions appropriate to PC2009 can be found in the ISO 19005-1:2005 - Document management -- Electronic document file format for long-term preservation, or the latest revision thereof.

### 4: Storage Medium

- (1) Original file. All PDF/A records regulated by PC2009 shall be generated on Adobe Acrobat or a compliant product stated on *AIIM - PDF/A Compliant Products List*, and burned to a Gold Preservation DVD.
- (2) Duplicates. The original or "first generation" file shall be maintained for security purposes and not for reference. At least one duplicate copy of all records scanned shall be prepared for reference purposes and stored on a hard drive. These records will have the ability to be accessed via the internet.

### 5: Preparation of Documents

- (1) Original Documents. Original source documents should be of sufficient legibility and high quality to ensure a scan of high quality. Should the source documents be of inferior legibility or of low quality, the scanned output will be of similarly inferior legibility.

Proper care shall be taken in the preparation and arrangement of original records for scanning, to ensure that a true and accurate reproduction will be made. All staples, paper clips, folds, attachments, etc. shall be removed before document scanning. Source documents shall be arranged and scanned in a manner consistent with their customary reference and usage.

- (2) Resolution. The method for determining the minimum required resolution shall be based on the paper document type and can range between 150 and 300 dpi.

Resolution of 150 dpi will be used for black and white images only, while 300 dpi will be used for high quality OCR conversion. In cases where there is a mixed batch of various document types and quality, 200 dpi will be sufficient.

- (3) Quality. Throughout scanning, images should be closely monitored to check for lines or unclear images. If lines are detected, scanning should cease and proper action must be taken to clean the lens before resuming scanning. Refer to the scanner being used for proper maintenance of the machine.

(4) DVD Identification. Specifications for DVD identification should be followed as given in the Recommended Practice for the Identification of Microforms, ANSI/AIIM MS 19.

At a minimum, identification targets shall display the following information: name of the agency by which records are held; the declarations by the records custodian and scanner operator; the title of the records (with identification of contents if not evident from series title); legal citation for access restriction (if any); the date of scanning; and where possible, the inclusive dates, numbers, names or other data identifying the first and last records on the DVD.

## 6: Storage

Standards for storing original or duplicate DVD's shall comply with NATIONAL ARCHIVES AND RECORDS ADMINISTRATION 36 CFR Part 1228 RIN 3095-AB03 Sec. 1228.270 Electronic records, (c), 2.

(1) Storage Containers. The DVD's shall be packaged either in chemically stable containers of metal or inert plastic of proven quality or paper-board boxes of low acidic composition. Plastics and lacquers that might give off reactive fumes or emissions during storage shall not be used. The plastics must be free of peroxides. All containers and adhesives shall meet the standards of ANSI IT 9.2. Containers shall be sealed when necessary to maintain prescribed humidity limits or to protect the DVD's against gaseous impurities. If proper temperature and humidity are maintained as prescribed in 950 CMR 39.06(4), and if there is good ventilation and clean air in the storage area, the containers need not be sealed. Each container shall be properly labelled with the series title, DVD numbers, and number of documents (where possible).

(3) Storage Housings. DVD's shall be stored in closed housings such as drawers of shelving units equipped with doors, unless the film is in closed containers, in which case open racks and shelves may be used. Storage housings shall be noncorrosive and noncombustible. Air conditioning or ventilation shall be provided in accordance with ANSI IT 9.11.

(4) Storage Facilities. All original DVD's shall be housed in clean, dust-free, environmentally controlled circumstances affording the maximum in security. All storage areas shall be constructed and maintained in accordance with Processed Safety Photographic Film - Storage, ANSI IT9.11.

First generation, master DVD's shall be stored in fire resistant safes or vaults. Safes shall be UL Class 150 rated four hours. Vaults shall provide protection equivalent to ANSI/NFPA 232 except that provision for air-conditioning shall be made in accordance with ANSI IT9.11. Except in fire resistant buildings, all safes shall be on ground-supported flooring.