

Procedures for the Deposit of Colour Film in the Nova Scotia Film Preservation Cold Vault by Council of Nova Scotia Archives (CNSA) Institutional Members

BACKGROUND

Photographic film, including photograph negatives, is subject to physical and chemical deterioration of the base/support (nitrate, acetate, or polyester), the emulsion/binder and the pigment particles. The process of deterioration is accelerated if film is stored in a poor environment and, conversely, is appreciably slowed by storage in a stable low temperature and low humidity environment. The deterioration of nitrate and acetate base film is strongly dependent on relative humidity. Recent ANSI specifications recommend 20-30% RH for long term storage of acetate and polyester base film. Current literature suggests that film should be stored at as cool a temperature as is feasible while maintaining a low relative humidity.

The Nova Scotia Film Preservation Cold Vault is located at the Nova Scotia Archives (NSA) and is a standard Bally Data Shield Box made of prefabricated panels of 18-gauge steel with four inches of Styrofoam insulation. Four compressors operate in cycles and low humidity is maintained by a Munters™ desiccant dehumidifier vented to the outside. Approximate external dimensions of the storage chamber are 36' x 13' with an 9' x 5' alcove and a 9' x 5' vestibule. The vault is equipped with mobile shelving and has a capacity of more than 18,000 cans of film. The operating temperature and relative humidity are 0.5 C and 30% RH.

The Nova Scotia Film Preservation Cold Vault is owned and operated by the NSA. The CNSA, an original Cold Vault Consortium member, has been allotted space for 3,000 cans or equivalent free of charge due to its financial contributions and assistance in the acquisition of the original vault. Some space will be set aside for rental, the fees from which will help offset the costs of operation and maintenance of the vault.

DEPOSIT

Deposit of master colour film in the Nova Scotia Film Preservation Cold Vault may be made through [Rosemary Barbour](#) or [Barry Smith](#). One week's notice must be given before the delivery of film.

- Only colour preservation master still/sheet and moving picture film on an acetate or polyester base will be stored in the cold vault.
- No nitrate film will be stored. Very little colour nitrate film exists and nitrate film produced after 1930 is usually edge-marked "NITRATE".
- Glass plate negatives, black and white film, video, CD, or DVD will not be accepted for deposit.
- All film must be tested for vinegar syndrome by the depositor before transfer to the Cold Vault and a copy of the test results must be submitted with the deposit. Only film with an A-D reading of 1 or lower will be accepted.

- Acetate based films are prone to a decay referred to as “vinegar syndrome,” so called because of the production of acetic acid as a by-product of deterioration. These acidic fumes can be absorbed by other film in close proximity. A-D strips are used to determine the level of decay by reacting to the amount of acid present with a blue to yellow colour change. A-D strips are available from Carr McLean (item no. #82-428).
- All units (boxes, cans, etc.) of film must be listed and each unit must have a unique identifier comprised of the institution name and the container number. Additional information may be included at the discretion of the depositing archives.
- Film cans must be of rust-free metal or inert polypropylene. Some 16mm 10 ½" and 12" polypropylene film cans are available at cost from the NSA (contact [Rosemary Barbour](#)).
- Master colour photographic negatives and transparencies must be wrapped in neutral pH, unbuffered paper or placed in neutral pH, non-buffered (and preferably alum-rosin free, lignin-free and high alpha cellulose) envelopes, folders or boxes placed within a double freezer-weight Ziplock™ bag. Boxes must be no larger than 5" high x 36" wide x 12" deep in order to fit onto shelves.
- Choose housing supplies that pass the Photographic Activity Test (PAT). This is usually indicated in your archival supply catalogue. For further information on film housing supplies, contact [Rosemary Barbour](#).

ACCESS

Deposited film may be accessed periodically by arrangement with [Rosemary Barbour](#), [Barry Smith](#) or the CNSA's [Archives Advisor](#).

Two business days' notice is required to retrieve stored film in order to allow for at least one day of acclimation. Film stored at low temperatures must be allowed to warm up gradually to the dew point of the outer vault air before it can be removed from its container to prevent the formation of condensation on the film.

Units (can, bag) of film only will be retrieved for access.

- There will be a recall and re-deposit fee of \$10.00 for each unit made payable to the Public Archives of Nova Scotia.
- Deposit agreements for film retrieved more than six (6) times per year will be subject to cancellation and, if cancelled, the film will be returned to the depositing archive at its cost.

COLOUR FILM DEPOSIT AGREEMENT

An agreement, attached, will be drawn up between the NSA and each Archive for each deposit of master colour film.

This procedure document has been developed by the NSA in consultation with the CNSA and was approved by the CNSA Executive on 10 February 2006.