On December 12, 2007 graduate students in New York University’s Moving Image Archiving and Preservation Program participated in a training certification for shipping nitrocellulose film. A class 4.1 hazardous solid as defined by the US Department of Transportation, nitrocellulose film was the base for commercial theatre motion picture films released prior to 1951. Nitrate film has a low ignition temperature and the ability to burn rapidly after ignition. After burning, the film evolves toxic gases, which include nitrogen oxides and carbon monoxide. When kept in ideal storage conditions, the film is relatively stable. However, it is nearly impossible to keep the film in ideal conditions when shipping. Therefore, it is imperative for film archivists to understand the associated risks of nitrate and the proper shipping regulations and package procedures. During the one-day HAZMAT training course, MIAP students learned proper identification, classification, packing, marking, labeling, and documentation regulations for shipping and receiving nitrate film.

Aside from the potential physical danger nitrate film can cause employees and collections, archivists who are not instructed properly on how to ship nitrate film expose their institution to financial risk and liability. An employer who does not comply with proper HAZMAT shipping procedures faces civil fines from $250 to $50,000 per offence and criminal persecution can lead to fines and up to ten years in prison.

Many institutional archives still have large collections of nitrate film and these institutions must adhere to strict storage guidelines and safety measures. Even archivists working in small archives that are primarily paper based might be surprised to learn they too have nitrate film. In 2003, a small nitrate fire at the New York Historical Society caused the fire department to flood the museum with 500 gallons of water, damaging a large portion of their paper collections. Moving Image archivists need to be fully aware of the risks associated with their collections and proper transportation procedures needs to be an essential part of their knowledge base.

For more information on how to ship nitrate film refer to the US Department of Transportation of Hazardous Materials website: http://www.phmsa.dot.gov