

POLICY AND PROCEDURES FOR THE POST- ACQUISITION/PRE-STORAGE TREATMENT OF LARGE FUNCTIONAL OBJECTS (LFO)

Prepared by Paul Storch
Senior/Lead Objects Conservator
Daniels Object Conservation Lab
Minnesota History Center (MHS)
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Definitions of Terms:

The term **Large Functional Objects (LFO)** is used here to denote items such as, but not limited to:

- wheeled vehicles (both animal-drawn and self-powered)
- farm equipment of all vintages and type,
- industrial machinery
- some domestic machinery such as kitchen appliances.

Historic LFOs (in MN, generally 19th through 20th c.) are complex objects made of such materials as metal, wood, plastic or a combination of these. The surface treatments vary, depending on the type of object, its function, the time period, and the manufacturer.

Common Conditions of LFO's:

When such an object is acquired by a museum, it often has been:

- a) recently retired from active use
- b) kept in less than ideal storage conditions for many years after being retired from use.

Both situations often result in objects that:

- a) are covered with dirt and other foreign matter;
- b) are corroding under lubrication oil coatings;
- c) are possibly insect and/or rodent infested;
- d) have hydrocarbon-based, flammable fuels and lubricating oils left in their tanks and engine systems;
- e) have been used as repositories for discarded trash;
- f) were not cleaned after the last use;
- g) are in danger of losing surface details and information;
- h) pose a danger to other collections due to pest migration;
- i) pose a danger to staff due to the toxicity and flammability of the fuel and other

fluids.

Policy and Procedures:

The following Museum Collections and Conservation Department guidelines are intended to handle LFOs with any of the conditions (but not limited to these) noted above prior to final disposition in the MHS storage facilities. Conservation Department staff need to be notified in advance of a pending LFO acquisition in order to schedule inspections and other work.

1) Fluids and Lubricants:

The MHS should avoid, when possible, accepting any vehicles, engines, motors or containers that contain any amounts of flammable liquid fuels. The Museum Collections Department is responsible for requesting that all fuel tanks be emptied prior to donation. Other toxic liquids, and powders such as fertilizer and pesticides must be removed from agricultural tank equipment.

If this is not possible, then the Objects Conservator should empty the tanks and store the waste in properly labeled and recorded containers, working with the MHS Safety Officer to coordinate waste pickup and disposal.

2) Inspection for Leaks:

Museum Collections is responsible for identifying leaking oil gaskets, pans, and lines prior to acquisition. Museum Collections staff should contact the Conservation Department for assistance if needed.

3) Inspection for Insect Infestation:

The MHS (Curators and Objects Conservator) must be allowed to thoroughly inspect wooden equipment and vehicles for powder post beetles and other vermin on the source's premises. The MHS should then decide, based on the extent and activity of the infestation and other factors, whether or not to acquire the object. The decision can then be made to quarantine the object before either in-house or contract treatment is carried out. While there is not an area for the proper quarantining of insect infested large objects in MHS facilities, the tenting procedure that has been employed at the 1500 Mississippi Street storage facility has been adequate and effective.

4) Removal of Dirt:

The object(s) should not be excessively dirty and dusty. Caked-on mud on the wheels, axles and chassis of vehicles and equipment should be removed before entering an MHS facility, if at all possible. Grease may be left on metal parts as a protectant, but must not be encrusted with dirt or dripping off the object. All plant materials must be removed from the exterior and interior areas of equipment. Removal should take place on the source's property before transporting the object, if possible. If it cannot be done prior to

transport, then this initial cleaning work must be scheduled in advance with the Objects Conservation Lab to be done at an MHS facility.

5) **Removal of Debris:**

All discarded materials such as nails, scrap wood, wire, etc., that have been stored inside equipment and vehicles must be removed by the Museum Collections staff, preferably on the source's property, unless the Curator deems such materials to be of historical value because of age and/or provenance.

Program Costs:

Costs are involved with any conservation treatment. For this type of process there are two categories of costs:

- Expendable Supplies
- Time.

The supplies for stabilization /cleaning of LFOs and similar objects, such as furniture, come out of the regular Objects Conservation Laboratory operating supplies budget. This includes supplies such as cotton cloths, detergents, brushes, etc.

The time will be considered as Project/Bench time for the Museum Collections and counted as "objects treatment" on the daily lab accounting forms.

Rough time estimates (Conservator time only; "C") for the different types of tasks and objects are presented below. They are based on actual conservation experience and will give an approximate idea of the time involved and allow for a more cogent and informed decision-making process:

Field inspection of objects before acquisition:

2-4 hours, depending on location (travel and meal expenses may also be included)

Initial cleaning of surfaces, with condition assessment:

1.5-2.5 hours (Depends on size and complexity of the object)

Pest infestation treatment:

1-2 hours (in-house)

5+ hours with outside contractor PCO

Assisting with transport and delivery of LFOs:

minimum of 2 hours.

Summary:

This type of condition inspection and assessment prior to the final acquisition of LFOs and smaller objects is already being done by the Objects Conservator in cooperation with Museum Collections staff. The establishment of minimal guidelines for the potential acquisition of LFOs is critical given staff work loads and time allotments.

Cleaning and stabilizing LFOs before they are placed in storage will eliminate potentially hazardous situations and minimize the backlog of work for all concerned.