

National Archives and Records Administration

NARA 1562-S1
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SUBJECT: NARA 1562, Supplement 1: Frequently Asked Questions

NARA's IPM Plan for holdings areas includes blocking the entry of pests, avoiding the conditions that encourage infestations, monitoring for early detection of pests, and responding to any infestation with the least toxic methods available.

1. What are the requirements for the written Integrated Pest Management (IPM) Plan covering holdings areas?

a. The IPM plan must address prevention, monitoring and when necessary, elimination of pests in holding areas. The plan must also establish procedures to follow if a holdings area or if holdings are infested. At a minimum the Plan must:

- (1) Designate responsibility for plan development and for updating the plan.
- (2) Assign responsibility for implementing the plan.
- (3) Discuss prevention measures including:
 - (a) blocking entry points that allow pests to enter the building; and
 - (b) avoiding conditions that favor infestation.
- (4) Describe the planned monitoring program including:
 - (a) responsibility for oversight and implementation of the monitoring program;
 - (b) locations of traps;
 - (c) documentation of monitoring; and
 - (d) reporting procedures.
- (5) Describe response and remediation procedures and responsibilities when target pests are present or a holding is infested.
- (6) Establish frequency and techniques for inspecting and cleaning holding areas.
- (7) An IPM plan Template (NARA 1562-S2) is posted on NARA@work.

b. The plan must use best practices and be kept up to date.

- (1) The initial plan must be reviewed and approved by Preservation Programs.

- (2) The plan must be reviewed annually by the NARA facility manager, Preservation Programs and others as designated in the IPM Plan and must be updated as required.

2. What are the target pests of most concern for holdings preservation?

- a. Target insects include but are not limited to: termites, silverfish, cockroaches, clothes moths, powderpost beetles, carpenter ants and other wood boring insects, carpet and other dermestid beetles, and flies, and psocids commonly called book lice. These insects are of particular concern because they either feed on protein and cellulose materials such as paper, leather, wood, textiles, fur, feathers, horn, or they use these materials as nesting sites.
- b. Mice, rats and other rodents or small animals that may find their way into buildings.
- c. A concentration of, or increase in, any pests.
 - (1) Concentrations indicate a breach in the building or room structure that allows easy entry of pests, or the introduction of pests from a food area or from infested materials entering the facility.
 - (2) Any pest can serve as a food source and thus attract other pests.

3. What is evidence of a pest problem or potential infestation?

- a. Any live pest including the egg, larvae, pupa, and adult life stages.
- b. Stains, fly specks, holes, losses, tearing, or chewing marks on a holding or a holding container.
- c. Excrement including urine, feces or frass (fine, sandy deposits which will often be the color of the material the pests is feeding on).
- d. Cocoon-like webbing indicating the presence of clothes moths, spider webs, mud tunnels, and similar physical evidence of pests.

4. What measures can be taken to block the entry of pests into the facility and holdings areas?

- a. Maintain a tight building envelop that is free of adjacent vegetation.
 - (1) Inspect the building perimeter and areas inside the building where food and water are present at least annually and seal gaps around penetrations and cracks using a silicon caulking compound, fine mesh screening, steel wool, or another appropriate material or method.

- (2) Inspect holding areas at least annually and seal any gaps into the space larger than 1/8 inch. Discuss materials and methods to be used in holding areas with Preservation Programs.
- (3) Install and maintain brush style weather stripping on all external doors. It is also recommended on all doors leading to holding processing, exhibition production and storage rooms.
- (4) Keep external doors closed when not in use. Do not prop open external doors or doors into holding areas. Open loading dock doors only when receiving or loading a shipment.
- (5) Maintain an 18" buffer of hardscaping, also referred to as a mow strip, of concrete, pavers or decorative gravel around the entire perimeter of the building.
- (6) Trim tree limbs and bushes that touch or overhang the building.
- (7) Arrange exterior lights to draw insects away from building openings, and use lighting such as high-pressure sodium that emits a spectrum or frequency of light less attractive to insects.

b. Inspect and control materials entering the facility for signs of infestation.

- (1) Inspect all shipments entering the building for cleanliness and evidence of pest infestation. Do not bring materials suspected of infestation into the building.
- (2) Inspect holdings entering the facility and re-box any holdings in wet, damp, soiled, or dirty boxes into new, clean boxes.
- (3) Isolate holdings, holdings maintenance supplies or other materials that will enter a holdings area if there is any concern that the material may be infested. Talk with Preservation Programs about options such as use of the isolation/quarantine room at some facilities, or bagging small quantities of holdings.
- (4) Inspect pallets, crates and similar transport containers and equipment that will be stored and reused before and after each use. Clean pallets if visibly dirty or do not use them.
- (5) Do not stockpile used cardboard boxes, especially boxes that have held food stuffs, within the facility because they often harbor cockroaches and other insects.
- (6) Avoid stockpiling pallets and crates in any holdings areas. Avoid long term storage of empty wooden pallets and crates in holdings storage rooms.

5. What procedures should be followed to avoid infestations in holdings areas?

- a. Eliminate conditions that support pests.
 - (1) Maintain environmental conditions according to NARA 1571, Archival Storage Standards.
 - (2) Eliminate standing water caused by poor drainage away from the building or from clogged or dripping drains. Address condensation on pipes, ducts, and mechanical units.
 - (3) Do not feed wildlife, pets or stray animals near the facility.
 - (4) Use deterrence and exclusion techniques such as tensioned netting and pin-and wire installation for bird and bat control.
 - (5) Eating, drinking, chewing gum, and smoking are prohibited in any area where NARA original holdings are stored, processed, prepared, exhibited, transported, or otherwise present. (See NARA 260)
 - (6) Eat and drink only at designated areas and thoroughly clean all spaces where food was prepared, served, or consumed by wiping down counters and tables and vacuuming floors. Keep food supplies inside closed metal or heavy plastic containers.
 - (7) Use lidded containers for food trash within the building, for example in staff lunch rooms. Do not leave food trash in the building overnight. Remove all food-related trash to trash receptacles with closed lids and sides located outside the building and loading dock.
 - (8) Live plants, cut flowers, dried vegetation, and other materials that are sources of pest nourishment or shelter are not allowed in holdings storage, processing, exhibition or exhibition preparation areas, research rooms, or labs.
- b. Keep holding areas clean and free of clutter.
 - (1) Regularly inspect floors, shelving, walls, and other surfaces in holdings and processing areas for debris, dust and evidence of pests.
 - (2) Vacuum floors including under storage furniture at least quarterly.
 - (3) Conduct a more thorough cleaning annually, which may include vacuuming air vents, ducts and storage equipment, including shelving and cabinets, and dust boxes. Discuss housekeeping techniques with Preservation Programs.

- (4) Do not store non-holdings materials such as surplus office furniture and equipment and decorations in holding areas.
- (5) Avoid the accumulation of clutter in holding areas.
- (6) Store holdings maintenance, storage and shipping materials outside of holdings storage areas and inspect them regularly.
- (7) Keep floor space along walls open to facilitate inspection and cleaning.
- (8) Using plastic pallets in holdings areas is preferred. When wooden pallets and crates must be used, do not keep them in holding areas unless they have been certified according to International Standards for Phytosanitary Measures ISPM No. 15 *Guidelines for Regulating Wood Packing Materials in International Trade* (2002) with modifications to Annex I (2006) Produced by the Secretariat of the International Plant Protection Convention.
http://www.hp.com/packaging/Documentation/133703_ISPM15_2002_update2006.pdf
- (9) Elevate all the storage cabinets and shelving 3" or more off the floor. Use a kick-plate to seal the area between the bottom of the unit and the floor.

6. Where should monitoring traps be located?

Insect and rodent traps are used to identify insects and their routes of entry and to monitor the scale of a problem.

- a. Use a floor plan of each room to indicate locations of pest monitors. Label each trap with the date and location.
- b. Locate monitoring traps in all areas of the building where holdings are present and near all potential entry points into the building and sources of pest nourishment and shelter including:
 - (1) Holding storage rooms, stacks, processing rooms, research rooms, exhibition areas, and any other locations where holdings are accessed or may be present.
 - (2) External doors, windows, ventilation shafts, air intakes, skylights, loading docks, service connections and conduits, and other building openings that provide an entry route for pests.
 - (3) Food and water sources such as kitchens, lounges, vending machine locations, gift shops, and other areas where food is consumed, and restrooms, janitor closets, mechanical rooms, and other areas where water is present.

- (4) Locations where materials that may harbor pests are present, such as exhibition production areas, mechanical rooms, and areas where supplies, decorations and non-holding materials are stored or stockpiled.
- (5) Light sources attractive to pests such as windows and emergency lighting.
- (6) Position floor traps in the pathway of pests such as along the floor - wall junction, at door jams, near drains and sinks, in corners, and beneath shelving and other furniture. Locate hanging traps near light sources, entryways and near holdings attractive to flying insects such as rugs, leather, wood, and textiles.
- (7) If a trap is heavily infested, an increase in the number of pests occurs from month-to-month, or a trap contains a target pest, expand the location of traps out from the area of concern and increase the frequency of inspection of these traps to help identify the scale and source of the infestation.
- (8) Replace traps quarterly. If required, also replace traps between quarters whenever a target insect is found, numerous non-target insects are found or the adhesive becomes ineffective. Dispose of used insect traps and trapped vermin in sealed containers and remove from the building.

7. How are traps inspected and how are results recorded, reported, and acted upon?

- a. Inspect traps at least once a month and record presence of insects, rodents and other pests.
 - (1) Document presence of insects on a written format as required in the IPM Plan. Use NA 6066, *Integrated Pest Management Trap Inspection* or equivalent.
 - (2) Report monthly results to NARA facilities management as described in the IPM plan.
- b. An immediate response is required for any infestation that directly affects holdings, is at risk of spreading to holdings, or demonstrates that preventive measures are not effective. Report the following situations to the NARA facilities management, custodial unit supervisor, and Preservation Programs Preservation Officer and Conservation Liaison:
 - (1) Presence of any target pest in a holdings area or on a holding or its container.
 - (2) Regular and widespread occurrence of pests in or adjacent to holding areas, in exhibition galleries, or the loading dock.

- (3) Include the location and scale of the infestation (whole building, whole floor, rooms) and nature of the infestation. A brief description of the insect type and photograph should be included when possible.
- (4) Preservation Programs will acknowledge written notification of infestation within one business day. If acknowledgement from Preservation Programs is not received, please contact Preservation Programs again.
- (5) If identification of the type of pest infestation is required, send Preservation Programs up to three undamaged samples of each distinct type of pest either alone or in the sticky trap. Place the samples in a plastic container with tight-fitting lid or in a bag or box with protective padding to prevent damage to the specimen.

c. Quarantine the infestation as quickly as possible using sealed bags, containers, isolation rooms, or other sealed containers or locations.

d. NARA facilities management and the custodial unit staff will investigate the causes of the infestation. These may include materials brought into the facility or environmental causes. Investigation should include examining all traps, potential entry routes, potential sources of insect nourishment and potential areas for shelter and nesting.

e. Consult with Preservation Programs to develop an appropriate remediation plan and, if necessary, course of treatment action.

8. When may pesticides be used in holding areas or near holdings and how must they be applied?

- a. Pesticide application in holding areas or near holdings should be according to need. Use of pesticides is appropriate only if adequate control cannot be achieved with nonchemical methods and pests are actually present and have been identified, rather than by schedule.
- b. If Preservation Programs in consultation with the curatorial and facility staff decide that treatment with chemical pesticides in a holdings area is required, proposed application procedures and Material Safety Data Sheets for the proposed pesticides must be submitted for Preservation Programs approval before proceeding. No substitutions of alternative chemicals or changes in procedure can take place without consultation with Preservation Programs.
- c. Pesticide use should always consist of the least hazardous material, most precise application technique, and minimum quantity of material necessary to achieve control.
 - (1) Insecticides should be applied as baits formulated as solids, pastes, or gels. Interior application of spray or dust formulations should be selected only as a last resort or when solids, pastes, or gels are not practical.

- (2) Whenever possible, pesticides should be applied only as containerized or crack and crevice treatments in which the applied pesticide is not visible or exposed.

d. Pesticides must be handled, applied and disposed of in accordance to all Federal, State and local laws and regulations.

- (1) The contractor or Certified Applicator must provide labels and material safety data sheets to the contracting officer or NARA facility representative for every pesticide prior to use on the premises and must receive explicit approval before application.
- (2) Application must be applied by a Certified Pesticide Applicator. Persons "working under the supervision" of a Certified Applicator do not meet this standard. Pesticides should never be applied by Government employees.
- (3) Do not store pesticides on the premises.
- (4) Staff and volunteers must not be present during chemical treatment.

di. Document the pesticide use including the name, manufacturer, concentration, and application method. Document specifically locations in a room(s) that the pesticide was applied. Use NA 6064, *IPM After-Action Report: Pest Infestation in a Holdings Area*, or an equivalent form.

9. What procedures will be used if holdings must be treated in response to an infestation?

If Preservation Programs in consultation with custodial unit staff determine that holdings or holdings containers must be treated in response to infestation, a treatment plan will be developed and approved by Preservation Programs before proceeding.

- a. If feasible, immediately isolate the affected holding(s) by placing in a plastic bag tied or taped shut, or by placing the holding(s) in an isolation room.
- b. Potential non-chemical treatments include freezing, exposure to anoxic environments or a course of mechanical removal, cleaning, re-housing, and re-inspection.
- c. When holdings require remediation actions carried out by contractors or through contractual means, Preservation Programs must be included in discussions with contractors and approve all handling and treatment procedures.
- d. Document the treatment method using NA 6065, *IPM After-Action Report: Pest Infestation of Holdings* or an equivalent form.