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Overview

To address the increasing need to identify and address water damage at DEP facilities, the agency is issuing a new guidance document to help DEP staff address mold prevention and management of water damaged materials at DEP Facilities.

If left unaddressed, water damaged materials, particularly those that are porous, can promote the growth of mold. The most critical thing that DEP employees can do is to quickly identify and report areas where porous building materials and furnishings are water damaged. Mold is a fungus that can grow inside buildings on wet or damp surfaces. To those sensitive to mold (allergies or underlying respiratory problems), it can cause allergic reactions, trigger asthma attacks, or rarely cause other health problems. Mold needs water or moisture to grow, which makes the days and weeks following a flood event particularly conducive to this.

After a Flood Event

Especially after a heavy rain event, hurricane or flooding due to other causes (e.g. plumbing breaks), it is important to take steps to inspect facilities and workstations to identify areas that are water damaged or may have mold present. Furnishings, files, floor coverings, the areas around windows, skylights, doors, thresholds, walls, ceilings and ceiling tiles, underneath wall coverings, grout and tile covings should be checked for any of the following conditions.

- ➢ Standing water
- Evidence of ongoing leaks
- Presence of water or dampness (staining, dampness, mold growth on any porous material, including files)
- > Cracks in walls, window frames, ceilings where water can enter
- Presence of mold
- ➤ "Moldy" odors.

DEP employees and supervisors should take steps to be vigilant about making sure that their facilities and work areas are checked for the presence of water damage or mold growth. Mold can start growing within 24 to 48 hours, so identifying water damage and mold quickly is important.



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Water Damaged Material Management

If damp or wet building materials, coverings or furnishings are identified, employees should notify their Facility Coordinator, Responsible Individual or EHS representative. Steps should be taken as soon as possible to prevent indoor mold growth by ensuring any leak is repaired, removing wet or damp furnishings, papers or other materials, or quickly drying damp or wet areas with fans or blowers. Always seek to fix water leak problems immediately. The only way that mold is eliminated is by eliminating the source of the moisture.

Facility Coordinators or other designated representatives of bureaus/offices without a solid waste removal contract should immediately contact Facilities Management and Construction (FMC) EHS Director at 718-595-7241 to coordinate the removal of water damaged materials such as furniture, carpets, ceiling tiles, insulation and wallboards.

Mold Growth Management

If water damage is suspected to have resulted in mold growth, employees should notify their EHS representative. EHS representatives of bureaus/offices without a trained personnel or a mold remediation contract should immediately contact the FMC EHS Director (contact information is above) who will assist them in the coordination, cleaning and/or remediation of mold contaminated areas.

Prior to disposing of files and records, bureaus should consult with DEP's Records and Archives Management Office. Approval may be necessary from the City of New York Corporation Counsel.

<u>Training</u>

DEP personnel who are trained to perform mold cleanup should follow all required precautionary measures. Such persons should have received training on proper cleaning methods, personal protection, and potential health hazards associated with mold exposure to comply with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200). Training performed by EHS staff on proper cleaning procedures and recommended PPE is adequate.



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DEP trained personnel can clean non-porous materials such as smooth or painted concrete, hard plastic, tiles, metals and glass. They can also clean semi-porous materials such as wood that are not heavily covered with mold (less than 30 square feet). They may also remove, bag and discard limited amounts of moldy porous materials such as files or paper.

However, areas of porous materials such as carpets/padding, ceiling tiles, insulation, wallboards (gypsum board or plasterboard), and upholstered furniture that are heavily water damaged or heavily covered with mold (more than 30 square feet) should be removed from the building and discarded by professional services or by DEP staff with advanced training (Check with Bureau EHS staff or OEHS). Any mold cleaning or remediation performed by a contractor should have proper DEP oversight to ensure requirements are being met.

Mold Growth and Water Damaged Cleaning Procedures by Trained DEP Personnel

- 1. Prior to cleanup jobs, all potentially affected DEP personnel should be informed of the plan to clean mold growth (i.e. time, location, safety data sheet (SDS for cleaning product) and any other precautionary measures that may be required.
- 2. If operationally feasible, cleaning should be done after hours or on the weekend. However, if regular shift work is necessary, employees should be asked to leave the work area before cleaning begins.
- 3. Clean up and dry out wet areas quickly (within 24 to 48 hours).
 - Open doors and windows
 - Use fans (fans should be placed at a window or door to blow the air outwards rather than inwards) Make sure that there is an opening for fresh air to enter
 - Use appropriate equipment such as a wet/dry vacuum, an electric-powered water transfer pump, or a sump pump to remove standing water
- 4. Proper protective gear should be worn when cleaning mold growth (see below). Hands should be washed with potable water and soap after gloves are removed.



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- 5. Mold growth should be cleaned with soap or a detergent and water, **OR** a bleach solution of no more than 1 cup of household bleach in 1 gallon of water.
- 6. Items that are not water damaged should be covered or removed from the work area before cleaning begins.
- 7. Remove, bag and discard loose porous items affected by mold or have been wet for more than 48 hours, that cannot be thoroughly cleaned and dried. Contact bureau EHS or OEHS for guidance on waste disposal.
- 8. Contact Facilities Management and Construction (FMC) or DEP's Records and Archives Management Office at 212-490-4171 prior to the disposal of any water damaged or molded agency files/records to coordinate the appropriate disposal of such records.

Personal Protective Equipment (PPE)

- Safety Goggles
- Rubber Gloves
- Optional: N-95 disposable respirator (under voluntary use) Refer to the <u>NYC DEP Respiratory Protection Policy</u> for guidance on use.

Cleaning Supplies

- Soap or detergent and water OR a bleach solution of no more than 1 cup of household bleach in 1 gallon of water
- Disposable rags/sponges and scrub brush
- Buckets
- Heavy-duty plastic garbage bags

<u>Reminder - Prevent Mold Growth</u>

The most important and efficient steps that DEP employees can take is to PREVENT mold growth from occurring. If you see areas where there is a continuing leak problem, notify your Facility Coordinator, Responsible Individual or EHS representative. Periodically take a few moments to inspect your workspace or facility for development of damp areas or leaks.



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Take Steps to Fix Water Problems Immediately

- Correct water leaks
- > Dry any and all water-damaged items or areas

Control Moisture Sources

- > In rooms without windows, check that fans or exhaust vents are working
- > In rooms with windows, check that the window can be opened, as needed.
- Make sure that windows can be closed completely to prevent water infiltration.
- > Consider using a dehumidifier to lower humidity levels in basements.

If you have any questions about this guideline, please contact your EHS representative or OEHS at <u>ehs@dep.nyc.gov</u>.



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References

NYC DOHMH – 2008 New York City Guidelines on Assessment and Remediation of Fungi in Indoor Environments

Guidelines for the Protection and Training of Workers Engaged in Maintenance and Remediation Work Associated with Mold

OSHA Fact Sheet - Fungi Hazards and Flood Cleanup

Facts about Mold and Dampness