



Title: **Flood Response**

Number EH&S 2-3

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Pages 7

PURPOSE: To establish a uniform and systematic procedure for responding to flood emergencies to prevent unnecessary injuries or exposures to staff, students and visitors from microbial contamination.

SCOPE: University wide.

DEFINITIONS:

Clean Water: Supply side water, not wastewater.

Decontaminated: Treated with an appropriated disinfectant to eliminate the chance of spreading disease.

Disinfectant: A 1:10 mixture of household bleach and water, or other EPA approved tuberculocidal cleaner.

Flood: An overwhelming quantity of liquid other than chemical or radioactive material that is deemed to be a physical, health or environmental hazard. This condition could result in falls or electrical hazards, and involve sewage and other contaminants.

Gray Water/Sewage: Wastewater originating from a drain (sink, toilet, urinal).

PROCEDURES:

A. Notifications

1. Upon discovery of a flood, call Campus Operations and Maintenance, 2-6400. Provide information to the Operator regarding the location, intensity and type of flood. The Operator will make the following notifications:
 University Police911
 Custodial Services.....2-6400

B. Evacuation/Perimeter Control

1. In a situation where floods are uncontrolled or involve infectious waste or other hazards, staff may be instructed to evacuate the area by Custodial Services, Physical Plant or other responders.
2. Perimeter control must be established by staff in the area with assistance from Custodial Services, Physical Plant or other responders.

3. University Police will tape off affected areas, including the elevators if necessary. They will also control and divert traffic in and around the affected areas

C. Pre-abatement

1. Responders entering the affected areas will wear the appropriate personal protective equipment (i.e., impervious boots, impervious gloves, goggles, and face shield and protective clothing if splashing is likely).
2. Custodial Services or Physical Plant will establish a Decontamination Zone as follows:
 - a. An approved disinfectant (see Definitions) shall be used to decontaminate equipment that is removed from the contaminated area.
 - b. To control the spread of potentially infectious material to clean areas, all persons leaving the affected area shall walk across the Decontamination Zone barrier, which consists of:
 - i. Disinfectant soaked disposable absorbent pads placed on a clean area of the floor,
 - ii. Clean disposable absorbent pads dampened with water placed on the clean side of the floor,
 - iii. Clean, dry disposable absorbent pad placed at the end of the Decontamination Zone to dry material passing through.
 - c. All materials used for remediation of the flood must either be decontaminated with an approved disinfectant prior to leaving the flood area or discarded. This includes all plumbing tools and reusable flood response equipment.

D. Containment Materials

1. Custodial Services and the Physical Plant shall maintain spill containment materials.
2. Responders shall place spill barriers around the affected areas in order to contain the flood.
3. Reusable spill barriers shall be decontaminated by responders with disinfectant and returned to storage.

E. Abatement (Refer to Appendix A – Flood Abatement Response)

1. Response to a major flood shall occur within 24 hours, if known, to avoid injury to persons, damage to equipment and the amplification of mold in wetted materials.

2. Floods related to clogged grease traps or local drains will be handled by Physical Plant. Physical Plant shall be responsible to take measures necessary to correct floods related to building utilities. All employees entering the affected areas shall wear the appropriate personal protective equipment (see Section C).
 - a. If entry into a manhole or other confined space is required, Physical Plant shall obtain a Confined Space Entry Permit from the Department of Environmental Health and Safety.
3. Custodial Services shall remove water by mop or wet vacuum. All collected liquid must be poured into the sanitary sewer system (Do not pour into storm drains.).
4. Physical Plant shall install dehumidifiers in affected area to aid in the drying process.
5. Physical Plant shall remove cove base, if sheetrock was wetted, to aid in the drying of the sheetrock.
6. Wet ceiling tiles shall be removed by the Physical Plant. The ceiling tiles shall be replaced as soon as possible, but not before the source of the flood has been remedied.
7. Dry or discard wet items. Discard any contaminated food. Clean or discard contaminated items. Move wet items from floor to facilitate drying of floor or carpet, and wetted items.
8. Custodial Services staff shall mop floor with disinfectant after wet materials are removed.
9. Carpet Drying – For clean water floods, Custodial Services will extract water from wet carpet using wet/dry vacuums, and then sanitize and disinfect. For gray water/sewage floods, Custodial Services will only extract water from wet carpet using wet/dry vacuums.
10. Contaminated carpet or carpet tiles requiring removal, shall be removed by the Physical Plant as per Appendix A. If the carpet can not be removed without disturbing underlying flooring, EH&S will coordinate the sampling of the flooring and mastic. If any of the materials are determined to be asbestos-containing materials (ACM), EH&S or Facilities, Design and Construction shall arrange for an abatement project
11. Physical Plant, using a moisture meter, shall measure moisture content in sheetrock. Sheetrock requiring removal shall be removed by the Physical Plant as per Appendix A.
12. Non-essential contaminated files and paper shall be discarded. Remove essential paperwork from the flooded area to a location where it can be dried, photocopied, and then discarded. Leave all file cabinet and desk drawers

open to facilitate air-flow and drying. Never let paper products become moldy. Refer to Appendix B for document restoration companies.

13. Custodial Services in conjunction with the affected department shall disinfect all reusable equipment in the Decontamination Zone.
14. All staff shall use the Decontamination Zone when leaving the flood area.
15. Responders shall place contaminated disposable items (i.e. personal protective equipment, wet carpet and ceiling tiles) in plastic bags, and discard in the regular trash.

F. Exposure Procedures

1. If someone has come in contact with sewage flood water, the following should occur:
 - a. Remove contaminated clothing.
 - b. Wash affected area with soap and water.
 - c. Go to the Stony Brook Occupational Medicine facility or the Emergency Department (off hours) for follow-up treatment.

G. Post Cleanup Recordkeeping

1. Responding department(s) shall complete the Flood Response form provided in Appendix C.
2. Completed Flood Response forms shall be maintained by the responding department(s).

INQUIRIES/REQUESTS:

Environmental Health and Safety
110 Suffolk Hall
Zip 6200
Main Office: 632-6410
FAX: 632-9683

RELATED FORMS:

Flood Abatement Response (Appendix A)
Document Restoration Companies (Appendix B)
Flood Response form (Appendix C)

RELATED DOCUMENTS:

Confined Space Entry, Policy 1-6
Microbiological Control after Water Intrusion,
Policy 1-11
Waste Management, Policy 8-1

APPENDIX A – FLOOD ABATEMENT RESPONSE

<p>CLEAN WATER (Response WITHIN 24 hours of flood)</p>	<p>Mop and vacuum area. Use commercial dehumidifier to dry area.</p> <p>Remove and replace affected ceiling tiles.</p> <p>Extract water from affected carpet with wet/dry vacuum. Sanitize and disinfect.</p> <p>If sheetrock wetted, remove cove base to facilitate drying of sheetrock. Check process with moisture meter. If unacceptable sheetrock moisture reading after 72 hours, remove sheetrock at least 12” from the moisture mark (2).</p>
<p>CLEAN WATER (Response AFTER 24 hours of flood)</p>	<p>Mop and vacuum area. Use commercial dehumidifier to dry area.</p> <p>Remove and replace affected ceiling tiles.</p> <p>Extract water from affected carpet with wet/dry vacuum, sanitize and disinfect. Assess whether carpet requires removal (1)*.</p> <p>Check sheetrock with moisture meter. If unacceptable sheetrock moisture reading, remove sheetrock at least 12” from the moisture mark (2).</p>
<p>GRAY WATER or SEWAGE</p>	<p>Mop and vacuum area. Use commercial dehumidifier to dry area.</p> <p>Remove and replace affected ceiling tiles.</p> <p>Extract water from affected carpet with wet/dry vacuum and then remove carpet (1) *.</p> <p>Check sheetrock with moisture meter. If unacceptable sheetrock moisture reading, remove sheetrock at least 12” from the moisture mark (2).</p> <p>Disinfect or discard contaminated items.</p>

NOTE 1: IF THE CARPET CANNOT BE REMOVED WITHOUT DAMAGING THE FLOORING, CONTACT EH&S (2-6410) TO DETERMINE IF FLOORING CONTAINS ASBESTOS. A SAMPLE OF THE FLOOR TILE AND MASTIC WILL NEED TO BE COLLECTED BY EH&S AND ABATEMENT MAY BE NECESSARY.
* IF CARPET TILES ARE INVOLVED, REMOVE ALL SOILED TILES PLUS ALL IMMEDIATELY ADJACENT UNAFFECTED DRY TILES.

NOTE 2: ANY DEVIATION FROM THE 12” RULE MUST BE DISCUSSED WITH ENVIRONMENTAL HEALTH AND SAFETY 2-6410.

APPENDIX B – Document Restoration Companies

Munters Corporation

160 Raritan Center Parkway
Raritan Center, Suite 11
Edison, NJ 08837
Phone: (800) MUNTERS (686-8377)
Contact: Joe Weitz (LI/Manhattan)
[www. muntersamerica.com](http://www.muntersamerica.com)

Blackmon-Mooring-Steamatic Catastrophe, Inc. (BMS)

75 Maiden Lane, Suite 212
New York, NY 10038
Contact: Larry Smith, Regional Director
Phone: (800) 433-2940
Mobile: (917) 499-5234
www.blackmonmooring.com

Cotton Restoration Inc.

Corporate Headquarters
14345 Northwest Freeway
Houston, Texas 77040
Phone: (713) 849-9300
24 Hour Call Center (877) 511-2962
www.cottoncat.com

Appendix C - Flood Response Form

Instructions: Please complete this form after every major flood response. File completed forms in responders' department files.

Date/Time of Flood:	
Responding Department(s):	
Flood Location (Building/Floor/Room):	
Department(s) Affected:	
Type of Flood (e.g., Clean, Gray or Sewage):	
Estimated Volume of Flood in Gallons	
Cause of flood (e.g., sanitary water back up, broken water pipe):	
Personal Protective Equipment Worn:	
Remediation Performed:	
Names of any Exposed Persons:	
Any Necessary Follow up:	
Comments:	

Form Completed by: _____ Dept.: _____

Print Name

Date: _____

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