I. Program Description

The purpose of this document is to provide guidance and response procedures for Project Support Personnel to water intrusion events inside buildings. Water damage occurring inside a building can be very disruptive and costly to occupants and building owners. Although an expedient response is critical, taking short cuts can have undesirable consequences such as mold growth, mold discolored surfaces, and odor problems. Molds and fungi may cause allergic reactions in susceptible individuals as well as other potential health problems. This document provides a practical approach to handling water damage.

II. Scope

This document applies to all situations where a water intrusion event has occurred. The event may impact various building construction materials such as, but not limited to, flooring materials, framing network, wallboard, insulation, and ceiling components.

III. Definitions

Project Support Personnel: Staff involved in mitigating the water intrusion event. Personnel include employees from Facilities Management staff or contractors acting on behalf of UC Irvine to address the water intrusion event.

Water Intrusion Event: An incident involving the incursion of water into spaces that are occupied or can be occupied. The incident may involve clean or contaminated water that results from, but not limited to, flooding, leaks, or spills.

Gray Water: Water containing a significant level of contamination and has the potential to cause discomfort or sickness if consumed by or exposed to humans.

IV. Responsibilities

Project Support Personnel are responsible for following the Process Components. Environmental Health and Safety (EH&S) may be consulted for Program clarification, monitoring, quality control, and Project oversight.

V. Specific Program Components

To preempt microbial growth, immediate action by Project Support Personnel is required following a flood or water leak. The following list of considerations, (if carried out quickly and carefully) should prevent or greatly limit microbial growth.

1. If applicable, shovel out the worst of the mud and silt before it dries. Use a hose if necessary.
2. Before the area has dried out, scrub the floors and woodwork with a stiff brush, plenty of water, a detergent, and a disinfectant. A solution of 1/4 -cup liquid chlorine bleach per one gallon of water makes an adequate disinfectant. Test a small area for colorfastness. Remove the mud and silt from corners, cracks, and crevices.
3. Clean glued-down carpet in place before attempting to pull it up. Use a wet/dry vacuum to extract the water and then shampoo the carpet with detergent. Glued-down carpet may be adhered to asbestos-containing flooring material; confer with EH&S before pulling up the carpet. If the carpet is not glued down, roll up the carpet and move it to another location for cleaning. Remove and discard the spongy carpet padding. After the carpets are rinsed, quickly dry them by turning on the heat and using dehumidifiers. Wet carpet should be thoroughly dried within 48 hours; if this is not possible, discard the carpet. Materials contaminated with sewage or gray water must be completely discarded.
4. If a professional carpet cleaner is retained, a steam cleaning method (hot-water extraction) is preferred.
5. After the carpet is thoroughly dried, vacuum the area. Give floors a thorough final washing with a non-sudsing cleaning product. Repeat the drying process. Vacuum again. Until the floors are thoroughly dried, runners should be placed on tile, or other slippery floors to help prevent slips and falls. The musty smell can be reduced by following these procedures:
   a. Sprinkle baking soda over the carpet, working it in with a broom or sponge mop.
   b. Leave the baking soda treatment on overnight.
   c. Vacuum the baking soda out. Vacuum twice, moving back and forth in a different direction the second time.
6. Walls may wick up and retain water. Water may also accumulate in the interstitial spaces between walls. Prior to disturbing wall systems (drywall, baseboard), confer with EH&S to determine if asbestos is an issue. Remove all wet baseboards and drill holes between studs a few inches above the floor to drain these areas. Inspect the drywall and the interstitial spaces to determine if it is wet. Use a moisture meter to determine the extent of penetration.
7. Wet walls must be removed to at least the flood level, or dried by cutting holes at strategic locations to increase air circulation. Serious fungi contamination can occur on the back of the drywall if left wet. Cut several inspection holes in the walls to determine if the wall interior is wet.
8. Walls containing fiberglass insulation must be removed. Check the metal track for water accumulation.
9. Wet ceiling tiles must be dried or discarded.

10. Water can flow a considerable distance on hard ceilings. Thoroughly inspect hard ceilings that may be wet. Dry or remove all wet ceiling gypsum board.

11. The area under floor-mounted cabinets is difficult to dry out. The cabinets must either be lifted or panels removed from the cabinet to allow for water removal and drying.

12. Paper products and boxes must be completely dried or discarded.

13. Electrical circuits in the walls under the floors and in ceilings may be wet. These should be inspected by a qualified electrician.

14. Computers and other electronic equipment should be inspected by a qualified technician before they are re-energized.

Good ventilation is essential to the rapid removal of water vapor. Open windows and doors and/or adjust the ventilation equipment to provide as much air exchange to the outside as possible or use blowers and dehumidifiers until the carpet is dried. Use a dehumidifier to extract water out of the room air and maintain relative humidity to less than 70 percent (less than 60 % is desirable).

VI. Reporting Requirements

Reporting the event is not mandatory; however, EH&S should be consulted for guidance and quality assurance.

VII. Information and External References

IICRC Standard and Reference Guide for Professional Water Damage Restoration, S500-94 document prepared by the Institute of Inspection, Cleaning, and Restoration Certification

VIII. Competency Assessment and Training Requirements

There are no training requirements. Recommended training for UCI Project Support Personnel would be “Health and Safety Guidelines for Staff Support Personnel” (HAZCOM for Staff Support personnel).