The University of Texas at San Antonio Office of Environmental Health, Safety and Risk Management

Mold & Water Intrusion Safety Plan

## i. Signature Page

This Mold and Water Intrusion Safety Plan has been reviewed for regulatory compliance and best management practices by the undersigned individuals and is hereby adopted for use and compliance by all employees at The University of Texas at San Antonio.

PRINTED NAME	SIGNATURE	TITLE	DATE
J. Brian Moroney	Signature on file	Director, EHSRM	
Richard M. Garza	Signature on file	Environmental & Construction Safety Manager	
V. Keith Kewley	Signature on file	Asbestos Management Coordinator	

This plan was reviewed on 12/17/2008; there were no revisions made to this plan.

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### iii. EMERGENCY PROCEDURES & CONTACTS

If material visibly contaminated with mold is to be disturbed (via cutting, sawing, drilling, prying, etc), the Asbestos Management Coordinator / EHSRM must be notified immediately. The dust and debris from this work must be cleaned up using HEPA-filtered equipment, and by personnel trained in the proper techniques to accomplish the clean-up without further contamination of the indoor environment/or risk of incidental mold spore exposure to area occupants.

The Asbestos Management Coordinator / EHSRM will be responsible for engaging the proper personnel to perform the clean-up. This may involve in-house personnel for small-scale incidents and/or an independent state licensed contractor, if deemed necessary.

To report a possible mold/ water intrusion related incident, OR if you have any questions or concerns regarding mold or water intrusion at UTSA, please contact the following:

UTSA Asbestos Management Coordinator:

V. Keith Kewley Phone: 210-458-4267 Email: <u>keith.kewley@utsa.edu</u>

Safety Specialist II:

John Burns Phone: 210-458-6625 Email: john.burns2@utsa.edu

EHSRM Front Desk:

Nancy Woodward Phone: 210-458-5250 Email: <u>nancy.woodward@utsa.edu</u>

For potential mold exposures, contact:

Occupational Health & WCI Coordinator

Thomas Murph, RN Phone: 210-458-5304 Email: <u>thomas.murph@utsa.edu</u>

## I. Statement of Purpose

The Office of Environmental Health Safety and Risk Management (EHSRM), in partnership with the Office of Facilities, provides a proactive approach to identify potential maintenance and repair problems caused by defective building subsystems such as broken plumbing lines or leaking air conditioning components. Problems found are assigned a high priority and coordinated with Facilities Services to minimize disruption to faculty, staff and students; and limit water damage and other environmental issues such as mold.

## **II.** Routine Inspections<sup>†</sup>

The approach outlined below utilizes a number of processes and measures, including thermal imaging and moisture meters –

- 1. All University-owned buildings will be visually inspected, annually, for indications of water leaks and/or water intrusions. When determined necessary, questionable locations will be further inspected using thermal imaging and moisture meters. (Note: thermal imaging and moisture readings will detect only the visible surface and will not provide analysis of drywall behind cabinets and other wall-mounted items.)
- 2. Specific cold spots, as indicated by thermal imaging, will be tested for moisture content to determine if levels are of concern. Points / areas that are found to have higher than acceptable levels of moisture content will be further inspected by use of a boreoscope and/or removal of material, to determine source of moisture and extent of damage. Environmental sampling and/or other tests may be performed, as deemed necessary.
- 3. Ductwork connections and devices at air handlers, bathroom exhausts and room diffusers will also be visually checked for potential leaks and/or moisture problems.
- 4. All angle stops and drains in kitchen, bathrooms, breakrooms, and labs will be checked.
- 5. Condensate drains from air handlers will be visually inspected.
- 6. Inspection findings will be assembled into a report, to include descriptions of problems found. Accumulated data such as moisture readings, thermal imaging, and/or digital pictures will be included. This report will be assembled jointly by Facilities and EHSRM personnel, with EHSRM maintaining primary responsibility so as to be aware of any and all moisture related issues. This report shall be completed and delivered to Facilities and EHSRM management within one working week of the inspection.

 + Not including Chaparral Village dormitories. Chaparral Village buildings shall be inspected in accordance with the procedures outlined in the separate Chaparral Village
• Water Intrusion program (See attachment 1)

- 7. EHSRM will be responsible for advising Facilities regarding appropriate methods for removal / remediation of water damaged and/or mold contaminated materials, as determined by the type, quantity, and location of mold discovered, if any; with potential risk to the University and compliance with the *Texas Mold Assessment and Remediation Rules* being the primary criteria.
- 8. Problem locations found to be serious and in need of immediate attention will be reported without delay, in advance of the formal report, so that corrective actions may be initiated.
- 9. Appropriate corrective actions for all other problems discovered during this inspection shall be determined by Facilities and EHSRM and scheduled accordingly.
- 10. Work Order(s) will be generated via Work Control for all corrective action needed, and assigned to appropriate maintenance shops.
- 11. Demolition / abatement of water damaged and/or mold contaminated materials will be accomplished by in-house maintenance personnel OR mold licensed contractor, as determined appropriate for each problem / location.
- 12. EHSRM shall be responsible for inspecting all demolition / abatement performed by in-house maintenance personnel to ensure removal of all affected materials.
- 13. EHSRM shall be responsible for acquiring a properly licensed mold abatement contractor when needed, and a properly licensed mold assessment consultant, if necessary; and shall oversee all work performed by these contractors, up to and including clearance of mold abatement work.
- 14. Reconstruction of facility will be accomplished by in-house maintenance personnel OR outsourced contractor, as determined by Facilities.

15. Facilities shall be responsible for acquiring reconstruction contractor, if needed, and shall oversee all work performed by this contractor, up to and including returning the facility to service.

#### III. Active Water Leak / Water Intrusion

The procedure outlined below shall be followed whenever a water leak and/or water intrusion situation is discovered / reported. Examples of water leaks and/or water intrusions include, but are not limited to, leaks from mechanical system piping, domestic water piping, RO water piping, plumbing drain piping, roof leaks, window leaks, rising flood water, etc.

- 1. Location and type of water leak / intrusion reported to Work Control and EHSRM immediately. (Work Control may notify EHSRM immediately after receiving report regarding problem.)
- 2. Work Control shall notify appropriate maintenance shops / personnel to address immediate problem and attempt to stop or minimize the water intrusion.
- 3. EHSRM will be responsible for determining extent of damage caused to structural facilities by the water intrusion, AND for advising Facilities regarding appropriate methods for removal / remediation of water damaged and/or mold contaminated materials, as determined by the type, quantity, and location of mold discovered, if any; with potential risk to the University and compliance with the *Texas Mold Assessment and Remediation Rules* being the primary criteria.
- 4. Work Order(s) will be generated via Work Control for all corrective action needed, and assigned to appropriate maintenance shops.
- 5. Demolition / abatement of water damaged and/or mold contaminated materials will be accomplished by in-house maintenance personnel OR mold licensed contractor, as determined appropriate for each problem / location.

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- 6. EHSRM shall be responsible for inspecting all demolition / abatement performed by inhouse maintenance personnel to ensure removal of all affected materials.
- 7. EHSRM shall be responsible for acquiring a properly licensed mold abatement contractor when needed, and a properly licensed mold assessment consultant, if necessary; and shall oversee all work performed by these contractors, up to and including clearance of mold abatement work.
- 8. Reconstruction of facility will be accomplished by in-house maintenance personnel OR out-sourced contractor, as determined by Facilities.
- 9. Facilities shall be responsible for acquiring reconstruction contractor, if needed, and shall oversee all work performed by this contractor, up to and including returning the facility to service.

#### Attachment 1

#### CHAPARRAL VILLAGE

#### WATER INTRUSION & MOISTURE CONTROL PROGRAM

UTSA Facilities Services (FS) and the Office of Environmental Health Safety and Risk Management (EHSRM) provides a proactive approach to identify potential maintenance and repair problems caused by defective building subsystems such as broken plumbing lines or leaking air conditioning components. Problems found are assigned a high priority and coordinated with the Office of Housing and Resident Life (HRL) to minimize disruption to students / residents and limit water damage and other environmental issues such as mold.

The approach outlined below utilizes a number of processes and measures, including thermal imaging and moisture meters -

- 1. All residence buildings, neighborhood centers, city center and associated offices/mechanical rooms will be inspected annually with the use of thermal imaging and moisture meters. Target times for residence inspections will be November / December holidays, spring break and summer break so as to provide minimum disruption to occupied apartment units. This inspection will include all walls and ceilings. (Note: thermal imaging and moisture readings will detect only the visible surface and will not provide analysis of drywall behind cabinets, vanities, and tub / shower liners.)
- 2. Specific cold spots, as indicated by thermal imaging, will be tested for moisture content to determine if levels are of concern. Points / areas that are found to have higher than acceptable levels of moisture content will be further inspected by use of a boreoscope and/or removal of material, to determine source of moisture and extent of damage. Environmental sampling and/or other tests may be performed, as deemed necessary.

- 3. Ductwork connections and devices at air handlers, bathroom exhausts and room diffusers will also be visually checked for potential leaks and/or moisture problems.
- 4. All angle stops and drains in kitchen and bathrooms will be checked.
- 5. Condensate drains from air handlers will be visually inspected.
- 6. Inspection findings will be assembled into a report, to include descriptions of problems found, and with thermal imaging and/or digital pictures to illustrate issues. This report will be assembled jointly by FS and EHSRM personnel to ensure that both departments are aware of all moisture related issues discovered, with EHSRM maintaining primary report distribution responsibility. A preliminary report shall be completed and delivered to FS and EHSRM management within 5 business days of the inspection period. A final report noting any immediate corrective actions taken will be distributed to the Director of Housing and Residence Life, AVP Student Affairs Administration and Planning, AVP Administration, and the AVP-Facilities within 20 business days of the inspection period.
- 7. EHSRM will be responsible for advising FS regarding appropriate methods for removal / remediation of water damaged and/or mold contaminated materials, as determined by the type, quantity, and location of mold discovered, if any; with potential risk to the University and compliance with the *Texas Mold Assessment and Remediation Rules* (TMARR) being the primary criteria.
- 8. Problem locations found to be serious and in need of immediate attention will be reported without delay, in advance of the preliminary or final report, so that emergency corrective actions may be initiated.
- 9. Appropriate corrective actions for all other problems discovered during this inspection shall be determined by FS and EHSRM and scheduled accordingly with HRL staff.
- 10. Work Order(s) will be generated via Work Control for all corrective action needed, and assigned to appropriate maintenance shops.
- 11. Demolition / abatement of water damaged and/or mold contaminated materials will be accomplished by in-house maintenance personnel OR a TX licensed mold contractor, as determined appropriate for each problem / location.
- 12. EHSRM shall be responsible to inspect all demolition / abatement work performed by in-house maintenance personnel to ensure removal of all affected materials in accordance with established regulatory and institutional guidelines / procedures, to include the use of proper personal protective equipment, as necessary.
- 13. EHSRM shall be responsible for acquiring a properly licensed mold abatement contractor when needed, and a properly licensed mold assessment consultant, if necessary; and shall oversee and inspect all work performed by these contractors, up to and including clearance of mold abatement work.
- 14. Reconstruction of facility will be accomplished by in-house maintenance personnel

OR out-sourced contractor, as determined by FS in consultation with HRL staff.

15.FS shall be responsible for acquiring a reconstruction contractor, if needed, and shall oversee all work performed by this contractor, up to and including returning the facility to service.

This program may be revised as necessary, but shall be reviewed at least once every three years by the Directors of Facilities Services and EHSRM.

<u>Signature on file</u> George Morales – Director of Facilities <u>Signature on file</u> J. Brian Moroney – Director of EHSRM