



# Aladdin Environmental LLC

321 W. Josephine \* San Antonio, TX 78212 \* 210-736-1826x218 \* Fax 210-732-9667  
John Spalten - Texas Mold Assessment Consultant MAC0383

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## Mold Remediation Protocol

San Antonio Housing Authority  
818 S. Flores  
San Antonio, TX 78212

Prepared for:

San Antonio Housing Authority  
Mirasol Task Force  
462 Precious  
San Antonio, TX

May 12, 2008

Prepared by:

John Spalten  
Mold Assessment Consultant  
TDSH License # MAC0383  
Expiration 3/2/10



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## Mold Remediation Protocol

SAHA Mirasol Task Force  
462 Precious  
San Antonio, TX

### Introduction:

Based on a visual inspection performed by Aladdin Environmental LLC on 5/9/08, areas of water damaged and/or mold affected materials were identified as described in the Work Area. The following Protocol outlines the recommended scope of work to be performed to investigate and, if necessary, remediate the affected areas.

This Mold Remediation Protocol is based on a visual inspection of the affected areas and/or sampling data collected by Aladdin Environmental. The full extent of the affected areas was not specifically delineated and may extend beyond the areas identified in this Protocol. The Protocol may be amended during the course of the project should additional areas of affected material be identified. This Protocol was prepared in accordance with Texas Department of State Health Services, "Texas Mold Assessment and Remediation Rules."

This Mold Remediation Protocol has been prepared by John Spalten of Aladdin Environmental LLC, Texas License MAC 0383, expiration 3/2/10.

  
\_\_\_\_\_  
John Spalten

5-12-08  
\_\_\_\_\_  
Date

### Remediation Activities:

- The project shall be performed in accordance with this Protocol and with applicable OSHA, Federal, State and local municipality requirements and/or building codes.
- All activities must meet or exceed the EPA "Mold Remediation on Schools and Commercial Buildings" publication.
- Remediation of the residence will involve removal of all contaminated porous materials and treatment or removal of exposed structural wood.
- The contractor will be responsible for obtaining all permits required for the work to be performed.
- If asbestos containing material is present, the remediation may have to be modified for proper removal and handling of such material.

### Personal Protective Equipment:

- All persons performing remediation activities and/or entering a Work Area during remediation activities shall wear a minimum of N95 respiratory protection.

**Work Area Remediation Preparation:**

- The contractor shall isolate the Work Areas. Limited Containment shall be in place during the remediation activities. The Work Areas shall be marked clearly as per TMARR.
- All HVAC supply or return registers along with any other openings in the Work Area shall be sealed during the remediation activities.
- All contents and furnishings present in Work Area shall be removed, or otherwise protected.
- At all times during the course of this project, the relative humidity within the Work Area shall be kept below 50%. Contractor is responsible for providing an adequate number and size of dehumidifiers in the Work Area to keep the relative humidity below the 50% level.

**Cleaning Procedures (where applicable):**

**Non-porous surfaces** – Surfaces shall be cleaned by HEPA vacuuming, wiping/cleaning with a surfactant/detergent solution, and a final HEPA vacuuming. This process is considered the minimum cleaning required. Additional cleaning/wiping may be necessary for heavily soiled surfaces.

**Porous surfaces** - With the exception of clothing and linens, cleaning of porous surfaces such as upholstery, carpeting, rugs and draperies shall be performed by thoroughly HEPA vacuuming all surfaces.

**Clothing & Linens** - Clothing and linens shall be cleaned by laundering according to manufacturer's recommendations. When cleaning in-place is specified, clothing and linens may be HEPA vacuumed or laundered based on cost considerations.

Use of any biocide or other chemical product by the Contractor during the course of the project shall be used in accordance with the manufacturer's instructions and only after review and approval of the product by the owner and/or occupant of the structure.

**Remediation:**

The affected area is more than 25 contiguous square feet, therefore requires notification to the State.

Limited containment to include the Hall, Master Bedroom, closet & bath is necessary.

**Master Bedroom & Closet:**

- Remove all carpeting & dispose.
- Remove baseboard & sheetrock to a height of 4' on all walls.
- Remove doors, trim & door frame(entry, bath & closet). Remove window sill.
- Clean/wire brush/sanitize all exposed wall cavities. If any wood rot is present, replacement of wood framing may be necessary.
- If additional water damage and/or mold is observed, remove materials at least 2' beyond damage.

**Master Bathroom:**

- Remove vanity & dispose. Remove toilet.
- Remove sheetrock to a height of 4' on all walls. Inspect behind tub to determine if removal is necessary.
- Remove vinyl flooring.
- Clean/wire brush/sanitize all exposed wall cavities. If any wood rot is present, replacement of wood framing may be necessary.
- The tub/shower area should be cleaned & sanitized.
- If additional water damage and/or mold is observed, remove materials at least 2' beyond damage.

**Hallway:**

- Remove all carpeting & dispose.

- Remove baseboard & sheetrock to a height of 4' on walls backing Master Bedroom & Bath. Inspect behind tub/shower to determine if removal is necessary.
- Clean/wire brush/sanitize all exposed wall cavities. If any wood rot is present, replacement of wood framing may be necessary.
- If additional water damage and/or mold is observed, remove materials at least 2' beyond damage.

The primary source of moisture needs to be corrected. This appears to have been from a plumbing leak in the master bathroom.

The following may be performed outside of containment due to the limited area affected.

Kitchen:

- Remove cabinet on right side of range opening (approx. 1' cabinet).
- Remove vinyl flooring.

Water Heater Closet:

- Pull water heater.
- Remove sheetrock 2' high from the walls. Clean/wire brush/sanitize all exposed wall cavities. If any wood rot is present, replacement of wood framing may be necessary.
- Place a HEPA filtered air scrubber in the Living Room.

Flooring:

- Remove all carpeting & vinyl flooring throughout the house.

Final Clearance:

- All sources of water intrusion need to have been repaired prior to clearance.
- Final clearance of the containment area shall be determined by visual inspection and air monitoring by an independent air quality professional.
- Clearance of the project area will be determined by collection of a minimum of one air sample and one surface sample within Work Areas and at least one air sample in the main living space.
- Clearance criteria for air samples is as follows:
  - Total spore count and individual genus spore counts of the indoor samples shall correspond in general to the outdoor spore counts. A minimum of one outdoor air sample shall be collected for each indoor sampling event.
- Clearance criteria for surface samples is as follows:
  - Surface samples which identify less than "moderate" amounts of mold spores and which do not indicate the mold is actively growing shall be considered sufficient to determine clearance of the Work Area.