

1

? Is There a Problem?

Stage 01- The Problem

- History of Water Damage
- Visible Mold Growth or Staining
- Musty, Damp or Wet Odor
- Physicians Diagnosis based on patient workup & labs
- Collecting Initial Home Environmental Testing
- MSQPCR

The Ideal Scenario Day 1

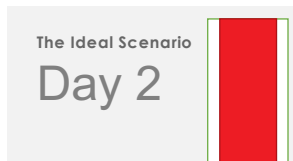
2



Where Are the Known Issues?

Stage 01 - The Problem

- **S – Subjective:** History of Water Damage/Staining, Past Remediation, Odor
- **O – Objective:** Confirming Observations, Laboratory Reports
- **A – Assessment:** Water damage Caused CIRS or Other Medical Issues
- **P – Plan:** Determining the Actions to be Followed
- **I – Implementation:** Following the Plan
- **E – Evaluation:** Checking On the Implementation
- **R – Revision:** Modifying the Plan & Implementation. Repeating Evaluation



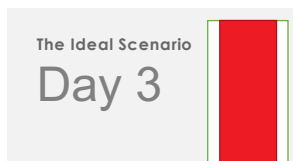
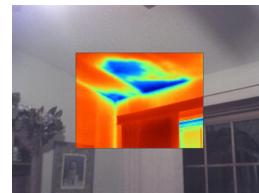
3



Investigation, Sample Collection & Submission

Stage 02 – Subjectively Determine Issues

- Occupant Observation & History
- Visual Inspection
- Form a Hypothesis
- Develop Sampling Strategy to Test the Hypothesis
- Does the Investigation Support the Hypothesis?
- Revise the Hypothesis or the Testing Strategy



4

Assembling the Team

Stage 02 - Determine the Issues

WHO ELSE IS IN YOUR SUPPORT COMMUNITY?
SUPPORT COMMUNITY

WHO DO YOU BRING INTO YOUR INNER CIRCLE?

REAL ESTATE AGENT
BUILDING INSPECTOR
LANDLORD

PHYSICIAN

YOU

ENVIRONMENTAL CONSULTANT

FAMILY FRIENDS

PERSONAL ASSISTANT
HEALTH CARE WORKERS
CLEANERS

NEIGHBORS

MOLD REMEDIATOR CONTRACTOR

The Ideal Scenario
Day 4

5

Overcoming Resistance to a Healthy Home

Stage 02 - Determine the Issues

Personal Grief <ul style="list-style-type: none">• Denial• Anger• Bargaining• Depression	Medical Obstacles <ul style="list-style-type: none">• Confusion/Inability to think clearly• Chronic fatigue• Pain	Other Obstacles <ul style="list-style-type: none">• Family• Friends• Neighbors• Finances• Misleading information
--	--	---

The Ideal Scenario
Day 5

6



Interpreting the MSQPCR results.

Stage 02 - Determine the Issues

Interpreting MSQPCR results can lead

- Is hidden growth likely and which areas are affected?
- Which areas need specialized cleaning due to spores/fragments?
- Are the results consistent with the diagnosis?
- Are their special measures necessary for occupant health?
- Is water damage superficial or chronic?

FORENSIC LABORATORIES
Fungal Analysis by PCR

Final Report

11/18/2021

11/18/2021

Sample ID	Sample Name	Sample Type	Sample Location	Sample Date	Sample Time	Sample Status	Sample Notes
001	Living Room	Surface	Living Room	11/18/2021	10:00	Completed	
002	Bedroom	Surface	Bedroom	11/18/2021	10:30	Completed	
003	Bathroom	Surface	Bathroom	11/18/2021	11:00	Completed	
004	Kitchen	Surface	Kitchen	11/18/2021	11:30	Completed	
005	Hallway	Surface	Hallway	11/18/2021	12:00	Completed	
006	Living Room	Air	Living Room	11/18/2021	12:30	Completed	
007	Bedroom	Air	Bedroom	11/18/2021	13:00	Completed	
008	Bathroom	Air	Bathroom	11/18/2021	13:30	Completed	
009	Kitchen	Air	Kitchen	11/18/2021	14:00	Completed	
010	Hallway	Air	Hallway	11/18/2021	14:30	Completed	

Continue on next page

Page 1 of 3

3777 Depot Road, Suite 406, Hayward, CA 94541 / Telephone: (510) 887-8828 (800) 627-6148 / Fax: (510) 887-4218

The Ideal Scenario

Day 6



Does the Outdoor Environment Influence the Indoors?

Stage 02 - Determine the Issues



The Ideal Scenario

Day 7



Considerations for the HVAC System

Stage 02 - Determine the Issues



The Ideal Scenario

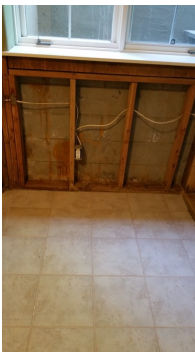
Day 8

9



Considerations - Basement, Crawlspace, Attic


Stage 02 - Determine the Issues




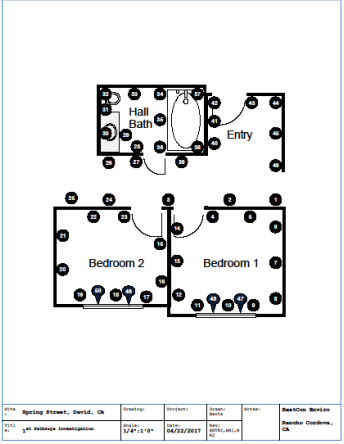
The Ideal Scenario

Day 9


10

 **Collecting Peptide Bonds/Proteins to Look for Hot Spots**
Stage 02 - Determine the Issues







DATE	ADDRESS	CLIENT	STATUS	DATE	STATUS
02/14	Spring Street, David, OK	RENTAL	ACTIVE		
02/15	1st Home Inspection	CLIENT	OK	04/22/2015	RENTAL

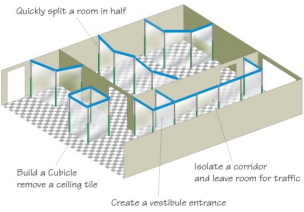


The Ideal Scenario
Day 10

11

 **The Remediation: Containment & Air Flow Controls**
Stage 03 - Implementation






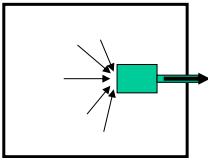
Quickly split a room in half

Build a Cubicle
remove a ceiling tile

Isolate a corridor
and leave room for traffic

Create a vestibule entrance





Negative Air
Machine Mode

The Ideal Scenario
Day 11

12

 **Physically Remove Mold & Other Organisms (Demolition)**
Stage 03 – Implementation



The Ideal Scenario
Day 12

13

 **Aggressive Cleaning & Surface Fine Particle Removal**
Stage 03 – Implementation



The Ideal Scenario
Day 13

14

Expand Work Area Based on Peptide Bonds & Proteins

Stage 03 – Implementation

The Ideal Scenario
Day 14

15

Clean, Clean, Clean

Stage 03 – Implementation

- Five Drops Non-toxic Dish Detergent
- Added to a Quart of Water
- In a Spritzer Bottle
- Spray the Cleaner on the Wipe.

The Ideal Scenario
Day 15

16



Fine Particle Cleaning Surfaces & Air

Stage 03 – Implementation



Fungal Enzyme Testing



Particle Counter

The Ideal Scenario

Day 16

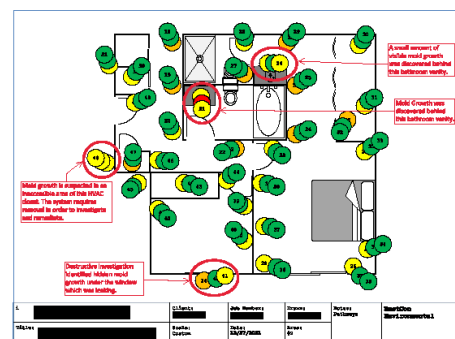
17



Cleanliness Testing Using Peptide Bonds & Proteins

Stage 04 – Remediation Evaluation


- This diagram shows the progression of Cleanliness
- The first round of testing was the initial testing
- The second round of testing was after cleaning
- The third round was two weeks after cleaning
- Notice the four areas that could not be cleaned or would not stay clean.


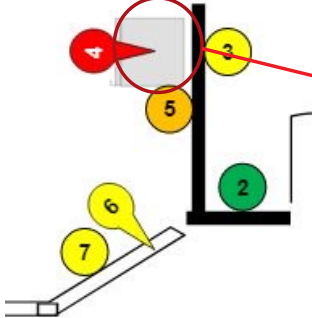


The Ideal Scenario

Day 17


18

 **Looking for Hot Spots**
Stage 04 – Remediation Evaluation






The Ideal Scenario
Day 18

19

 **Other Forms of Post Remediation Testing Results**
Stage 04 – Remediation Evaluation

- Beta-N-Acetylhexosaminidase (NAHA)
Fungal enzyme Testing



The Ideal Scenario
Day 19

20



Revising the Remediation Plan

Stage 04 – Revision – Repeat Steps as Needed

- Revise the Hypothesis
- Develop Sampling Strategy to Test the Revised Hypothesis
- Does the Investigation Support the Revised Hypothesis?
- Revise the Revised Hypothesis or the Testing Strategy as many times as necessary to get it rights.

The Ideal Scenario

Day 20

21



Post Remediation Testing Results


Stage 05 – Reconstruction & Maintenance



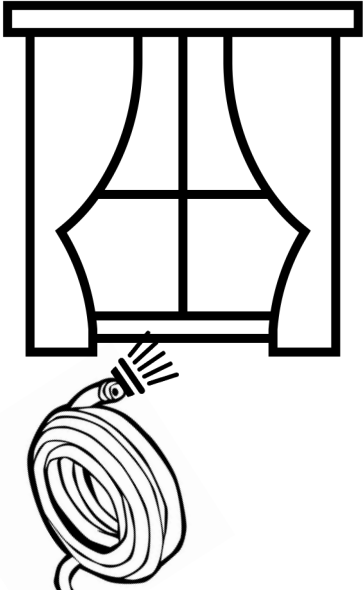
The Ideal Scenario

Day 21

22


 **Identifying the Source of the Water – Leak Testing**
Stage 05 – Reconstruction & Maintenance

- **Leak Testing Window**
- **Block Weep Holes**
- **Water fill the Window Track with Water**
- **Check after several hours to see if the water level has fallen.**




The Ideal Scenario
Day 22

23

 **Reconstruction**
Stage 05 – Reconstruction & Maintenance

- Design
- Materials
- Attention to Detail
- Quality Control



The Ideal Scenario
Day 23

24



Establishing Cleaning Frequency

Stage 05 – Reconstruction & Maintenance

- Monitor Cleanliness with Peptide Bond and Protein Testing to Determine Frequency and Effectiveness of Cleaning

L	Client	Job Number	Invoice	Access	ShortDoc
PAVIA	PAVIA	PAVIA	PAVIA	PAVIA	PAVIA

The Ideal Scenario
Day 24

25



What IEPs & Remediators Need from Physicians

Stage 05 – Reconstruction & Maintenance

- What do you need to know to facilitate your diagnosis and help patients get well?
- What information do you have that will be important for the environmental consultants and remediators?
- How do you communicate and remain HIPPA compliant?

Form titled "PATHWAYS" with sections for patient information, building details, and physician input. It includes checkboxes for mold growth, water damage, and HVAC issues. A section titled "Please indicate areas of interest below:" lists various mold and water damage scenarios. The form also includes a signature line for the physician and a footer with contact information for PATHWAYS peptide bond/protein testing.

The Ideal Scenario
Day 25

26