Mold Consultant & Remediation Vendor Specifications

for

Indoor Water Damage/Loss Related Work

Prepared, Reviewed and Approved by:
County of Los Angeles, **Facility Management EHS (Environmental Health and Safety) Best Practice Workgroup, October 2, 2018**

Water Damage / Mold Consultant Requirements

Any environmental consultant hired to conduct work for mold or water damage related matters (inspection, assessment, evaluation, sampling, lab sample interpretation, subsequent recommendations, etc.) at any County workplace (owned and leased), regardless of urgency or application (emergency response, FASMA, JOC, etc.), shall meet the following requirements:

a. Be able to respond immediately to emergency water release
b. Issue remediation actions within 24 hours
c. Issue formal report within 48-72 hours
d. Agree to limit information sharing with clients and media ; company staff not to discuss any details with County employees as all communication to go through Facility Management (FM) or Health & Safety (H&S)
e. Adhere to the specified guidance standards and references
f. Unaffiliated with the Water Damage Restoration and Mold Remediation vendor

All referenced mold or water damage related consultative work must be conducted *or* overseen directly by personnel possessing the following qualification:

Minimum Required Qualification:

- "Certified Industrial Hygienist" (CIH) through American Board of Industrial Hygiene: http://www.abih.org/

AND

- Minimum of 5 years of experience conducting mold investigations in past 7 years as verified via documentation

Candidates are to provide documentation to substantiate qualifications which include (1)a copy of the CIH Certificate, (2) past project start/end dates, (3) contact information for references and (4) full copies of ***redacted*** mold investigation final reports. *(Redacted: ALL client and facility location identifying information removed from report and replaced with general terms such as "client" and "facility")*

Desirable Qualifications:

"Council-Certified Microbial Consultant" (CMC) through American Council for Accredited Certification : https://www.acac.org/

OR

"Registered Environmental Health Specialist" (REHS) through California Department of Public Health : https://www.cdph.ca.gov/

Investigation Requirements:

Consultant shall use the following resource document as the foundation for their approach, criteria for identifying mold damage, investigative methodologies, evaluation of collected samples and resulting recommendations on remediation process. The entirety of the consultant's work product shall be consistent with and must not materially differ from the following industry best practice reference standard:

Recognition, Evaluation and Control of Indoor Mold *

ISBN: 978-1-931504-91-1, AIHA Publications

https://www.aiha.org/marketplace/Pages/Product-Detail.aspx?productid={3F9E0A5A-4778-DE11-96B0-0050568361FD}

Report Requirements:

The entire assessment and accompanying report shall be signed and stamped by the performing or overseeing CIH with accompanying certification seal (containing certification #) at the conclusion of report. **CIH must be on company payroll and cannot be sub-contracted by the contracted environmental consulting vendor.**

Final reports shall contain:

1. Photos of impacted areas presented in apparent context
    a. "Before and After" images for situations which require remediation
2. Statements that can be universally substantiated by citing reference standards, authoritative guidelines, applicable regulations, etc.
3. Executive Summary** which:
    a. Communicates gist of Recommendations & Conclusions
    b. Uses plain language appropriate to share with all stakeholders throughout organization (Executive Managers, Union Representatives, employees at the location)
    c. Makes subsequent actions clear by advising the County "client" of ***one of two general outcomes***:
        (1) The area is cleared for re-entry ***
        (2) The area needs to be remediated ****
4. For multiple sites, report should be written in the same format and structured similarly

** Sample report provided as Appendix A
*** Sample wording: "This industrial hygiene survey did not identify safety or health concerns that would prevent the space from being occupied by employees and public constituents" OR "as of the date of Consultant's report, no additional remedial action is required"
**** The following next steps need to be taken to return the space to Condition 1 (normal fungal ecology) as defined by the Institute of Inspection Cleaning and Restoration Certification (IICRC) Standard for Professional Mold Remediation S520

Water Damage Restoration / Mold Remediation Requirements

All **Water Damage Restoration** and **Mold Remediation** work performed at any County workplace shall be done so by a *Certified Firm* possessing the **titled certification** through the Institute of Inspection, Cleaning and Restoration Certification (IICRC):

http://www.iicrc.org/locate-a-certified-professional/

Work performed must be consistent with the standards set forth by IICRC for said scope of work. Those standards are the requisite certifying criteria and specified in the following:

ANSI/IICRC S500 Standard & Reference Guide for Professional Water Damage Restoration (2015) *

http://www.iicrc.org/standards/iicrc-s500/

ANSI/IICRC S520 Standard & Reference Guide for Professional Mold Remediation (2015) *

http://www.iicrc.org/standards/iicrc-s520/

Any inquiries regarding the certification process, requirements and maintenance of the credential, list of certified firms, etc. can be directed to the manager over the program. I have provided her contact information below:

Kim Stone | Certified Firms Manager
kstone@iicrcnet.org T: 702-430-7139
Global Resource Center
4043 S. Eastern Ave.
Las Vegas, NV 89119 . USA

IICRC
Institute of Inspection Cleaning and Restoration Certification

Additional **Water Damage Restoration** and **Mold Remediation Vendors requirements:**

1. Must adhere to the issued scope of work from the environmental consultant
2. Any additional work (discovery of other water-damaged areas) must be brought to the attention of the environmental consultant and/or the FM Project Manager
3. Cleanup vendor must provide the following to the Project Manager:
    a. Itemized daily manpower reports
    b. Roll-call of staff
    c. Equipment list
    d. Overtime and weekend rates
    e. Situations that would trigger aforementioned overtime rates
    f. Quotes and invoices that reflect the approved scope of work
4. Agreement to limit information sharing with clients

Water Damage Response Protocol

For County departments that possess trained personnel / internal capabilities to respond to and address minor water loss incidences, the following is offered as a guidance protocol *:

1) Mold growth on building material (drywall, plaster, concrete, etc.) is reported to Facilities Management (FM) or Risk Management (RM)
    a. FM/RM conducts inspection
    b. Mold growth <~100 sq. ft. on building material – remediated in-house by specially trained Facilities Management crew **
    c. Mold Growth >~100 sq. ft. on building material– remediated by outside contractor

2) Mold growth in air handler
    a. FM/RM conducts initial inspection
    b. Environmental consultant brought on if scope becomes complex beyond department's internal capabilities
    c. Remediation conducted by outside contractor

3) Water damage inspection following plumbing leak, flooding, etc.
    a. FM/RM or 3rd-party environmental consultant assesses the damage and issues scope of work consistent with references specified in this document
    b. FM crews conduct cleanup if smaller job, 3rd-party Water Damage Restoration and Mold Remediation company contracted for larger
    c. Environmental consultant conducts follow-up inspection to ensure remediation is complete

* EPA Guidelines for Mold Remediation in Schools and Commercial Buildings is to be used for protocol. The Water Damage Flowchart (Appendix B) is to be used to determine course of action and fate of impacted materials based on substrate, type of water, passage of time since initial water loss and other factors further detailed for various scenarios.

Primary References

- Institute of Inspection Cleaning and Restoration Certification - S500 Guide
- Institute of Inspection Cleaning and Restoration Certification - S520 Guide
- Recognition, Evaluation, and Control of Indoor Mold
- Water Damage Cleanup Flowchart
- EPA Guidelines for Mold Remediation in Schools and Commercial Buildings

** Contractors are responsible for remaining current with changes in regulations or industry best practices and must have these procedures implemented while conducting work with County of Los Angeles (CoLA). This includes, but is not limited to, abiding by the most recent editions of industry standard publications and the most current guidance and reference standards. Contractor is responsible for attaining and incorporating any updated versions to standards and must have the most current editions in use while conducting work with CoLA.

Appendix A

Limited Moisture Investigation Close-Out Report

Investigation	
Investigator: **Assessment Date:** January 11 and 18, 2018 **Report Date:** February 1, 2018 **Location/Affected:** XXXXXXXXXXXXXXX	**Project Number:** XXXXXXXXXXX **Requested By:** XXXXXXXXXXXX

Section 1: Project Background

_____ Environmental Services, Inc. (consultant) was contacted by XXXXXXXXXXXXX (Client) to provide moisture consulting services at the XXXXXXXXXXXXXXX (Site). Consultant understands that the Client requested services in response to moisture intrusion following recent rain activity. The purpose of the project is to assess site conditions and ensure that moisture and microbial impacted materials are mitigated in accordance with standard industry protocols.

Section 2: Observations

Consultant's Industrial Hygienist, "A", conducted the initial investigation on January 11, 2018 and Consultant's Technician of Industrial Hygiene and Safety, "B", conducted the final investigation on January 18, 2018 Field documentation is presented in Appendix A. The following observations were noted:

Initial Investigation-January 11, 2018

- Suspect Microbial Growth (SMG) noted on the base of the south wall in the southwest corner and near the center cut drywall
- Remaining drywall in the stairwell had slightly elevated moisture (0.5-0.7 %MC), may be due to high humidity within the space
- Monokote at the ceiling above drywall cut on the south wall wet per IR camera
- Elevated moisture found in the drywall in the following locations:
  - South wall beginning from the concrete and up approximately six inches, extending the entire length of the wall; center of drywall near southwest corner; there is also a small wet spot at the height of the bent pipe but directly under the cut drywall at the ceiling
  - East wall beginning from the floor and up approximately one foot, extending the entire length of the wall
  - South and east walls marked two feet past last signs of moisture/mold for removal

General recommendations made for moisture impacted materials were as follows:

- Remove impacted material, as noted; **removal should continue to two (2) feet past last signs of visible SMG and/or elevated moisture content**.
- Removal of moisture-impacted and/or microbial-impacted materials should be performed in accordance with standard industry practice (IICRC S500 Standard & Reference Guide for Professional Water Damage Restoration & IICRC S520 Standard & Reference Guide for Professional Mold Remediation), by an experienced remediation contractor, utilizing negative pressure containment(s)
- Please note that the actual scope of work is subject to change based on actual field conditions once intrusive work (removing cabinetry, drywall, etc.) is completed
- Contact Consultant for final visual inspection and sampling

Final Investigation-January 18, 2018

- Consultant observed the removal of the drywall as previously recommended
- No elevated moisture (0.3% MC) and/or signs of SMG in the east wall
- No elevated moisture (0.32 MC) and/or signs of SMG in the south wall
- Drywall was removed in the following locations:
  - South wall beginning from the southwest corner extending east approximately six feet and from the floor and up to the ceiling
  - East wall beginning from the floor and up approximately forty inches, extending the entire length of the wall
- Two dehumidifiers present and running at the time of the investigation

Section 3: Photographic Documentation

Photo 1: North Stairwell- East Wall (January 11, 2018)
View of marked drywall for removal.

Photo 2: North Stairwell- East Wall (January 11, 2018)
Thermal image of elevated moisture in drywall.

Photo 3: North Stairwell- East Wall (January 11, 2018)
Thermal image of elevated moisture in drywall.

Photo 4: North Stairwell- South Wall (January 11, 2018) View of marked drywall for removal.

Photo 5: North Stairwell- South Wall (January 11, 2018)
Thermal image of elevated moisture in drywall.

Photo 6: North Stairwell- South Wall (January 11, 2018)
View of marked drywall for removal.

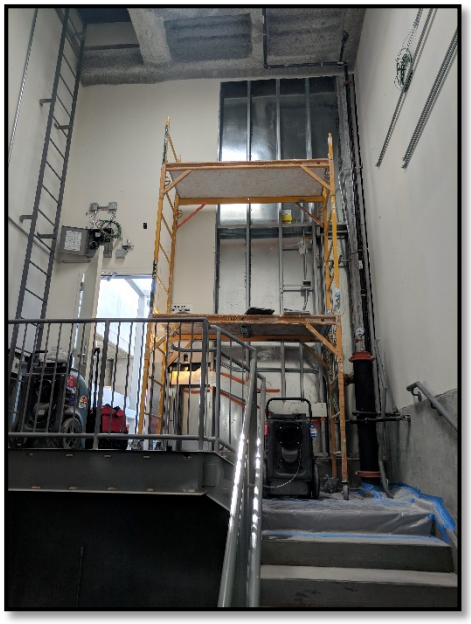


Photo 7: North Stairwell- South Wall (January 18, 2018)
View of removed drywall.

Photo 8: North Stairwell- East Wall (January 18, 2018)
View of removed drywall.

Photo 9: North Stairwell- South Wall (January 18, 2018) View of removed drywall.

Photo 10: North Stairwell- South Wall (January 18, 2018) View of removed drywall.

Section 4: Executive Summary (Conclusions & Recommendations)

As of the date of Consultant's report, no additional remedial action within the North Stairwell is required. It is Consultant's professional opinion that all moisture-impacted materials, limited to the North Stairwell, were cleaned and/or removed in accordance with standard industry practices. Moisture intrusion source(s) should be identified and repaired prior to reconstruction.

Section 5: Signatures

All work was conducted in accordance with industry standard protocols, and the standards of care and diligence normally practiced by recognized consulting firms in performing services of a similar nature.

Work Completed:
[Signature presented on field documentation]
"B"
Technician, Industrial Hygiene & Safety

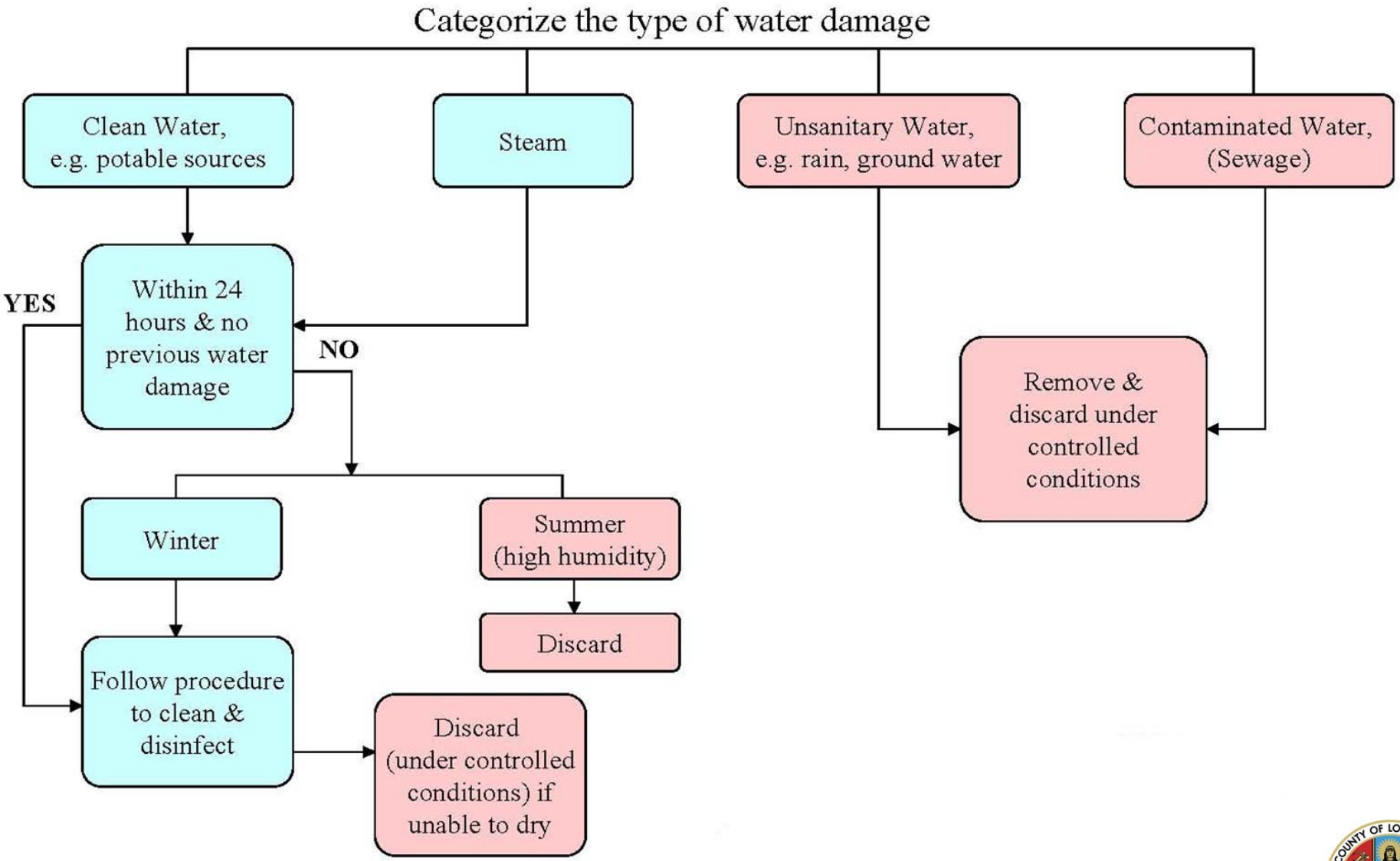
Work Completed and Report Prepared by:
[Signature presented on field documentation]
"A"
Consultant, Industrial Hygiene & Safety

Report Reviewed by:

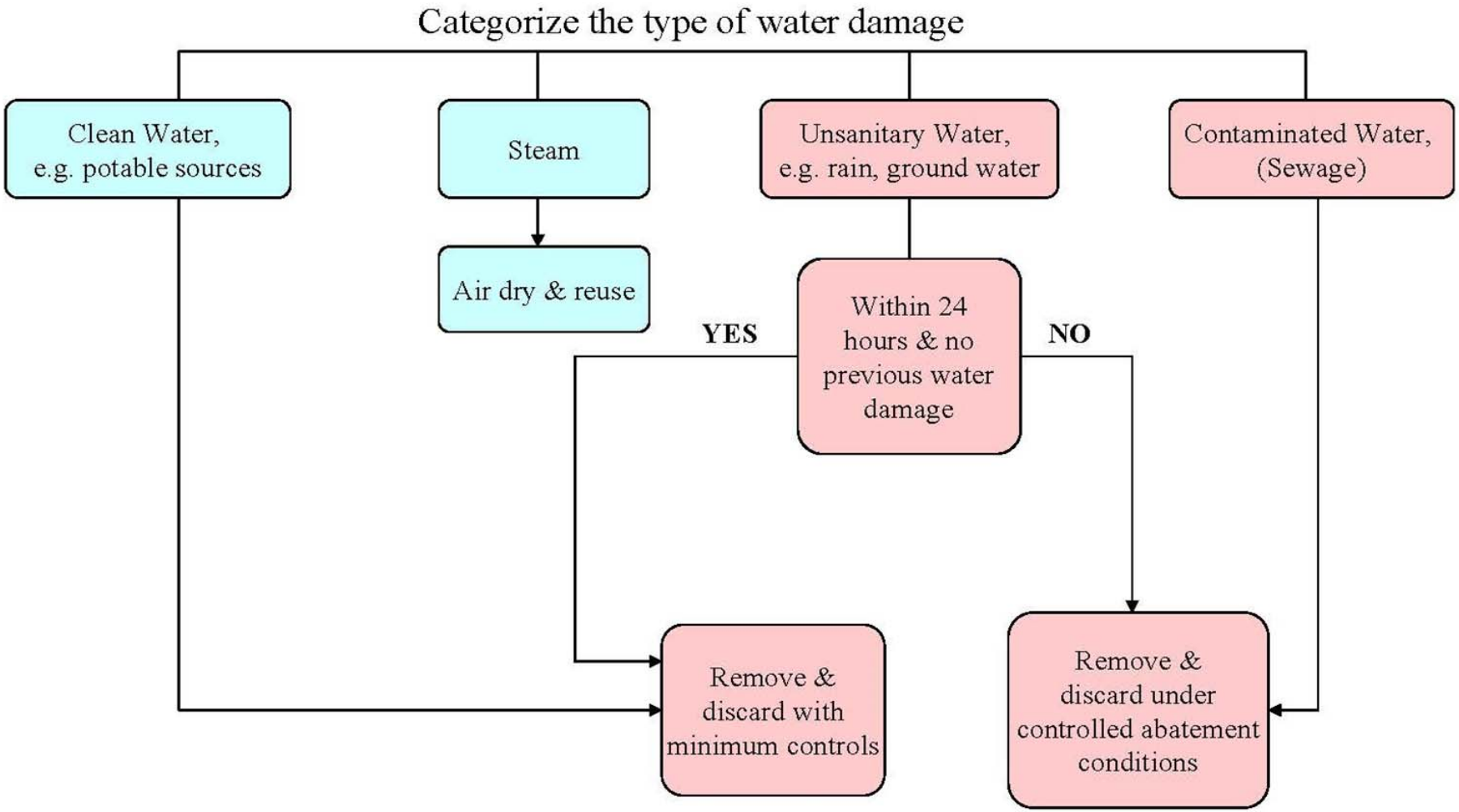
"C", CIH #xxxx, CAC # xx-xxxx, CDPH # xxx
Principal, Industrial Hygiene & Safety

Appendix B

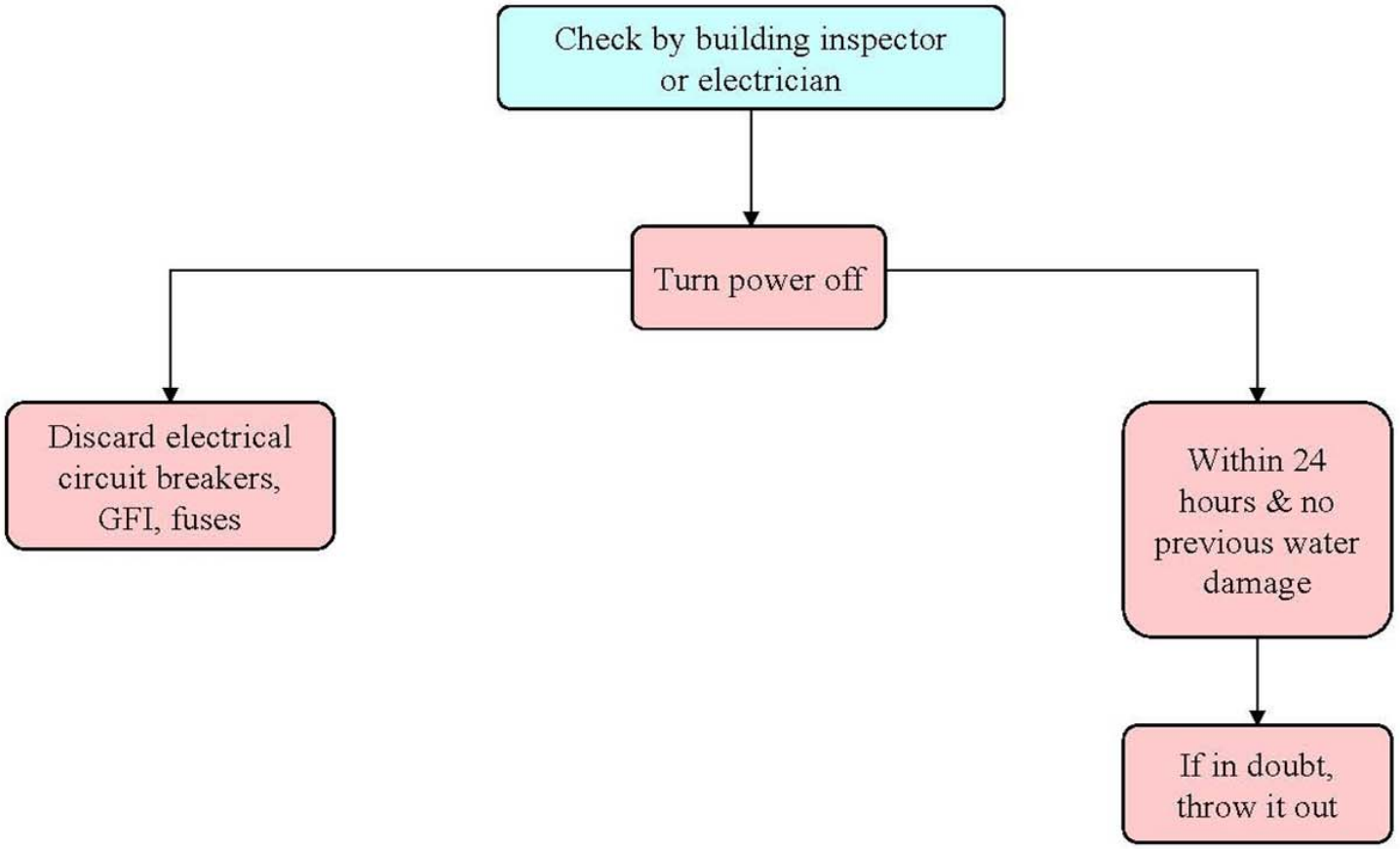
Decision Tree For: Carpet



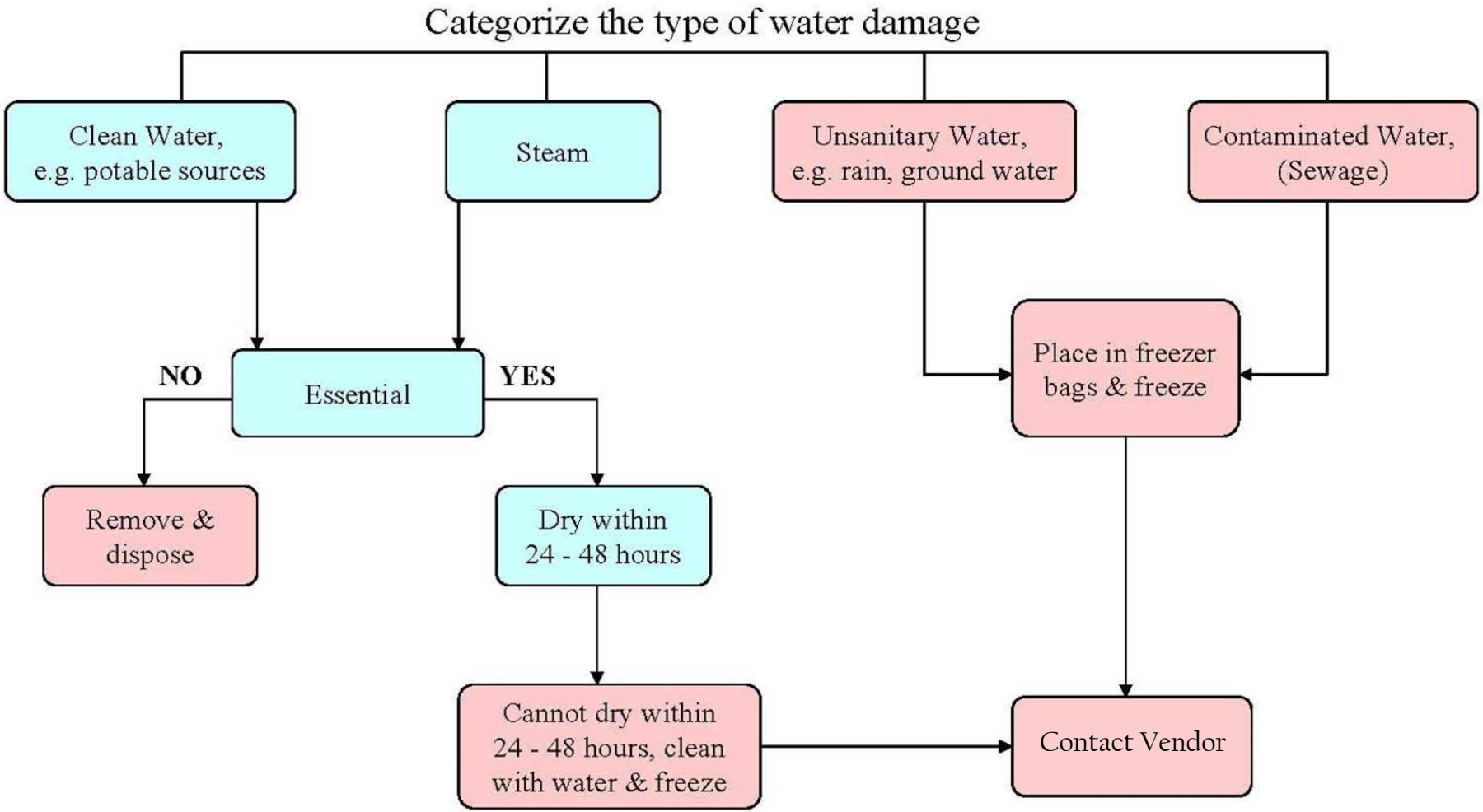
Decision Tree for: Ceiling Tile



Decision Tree for: **Electrical**

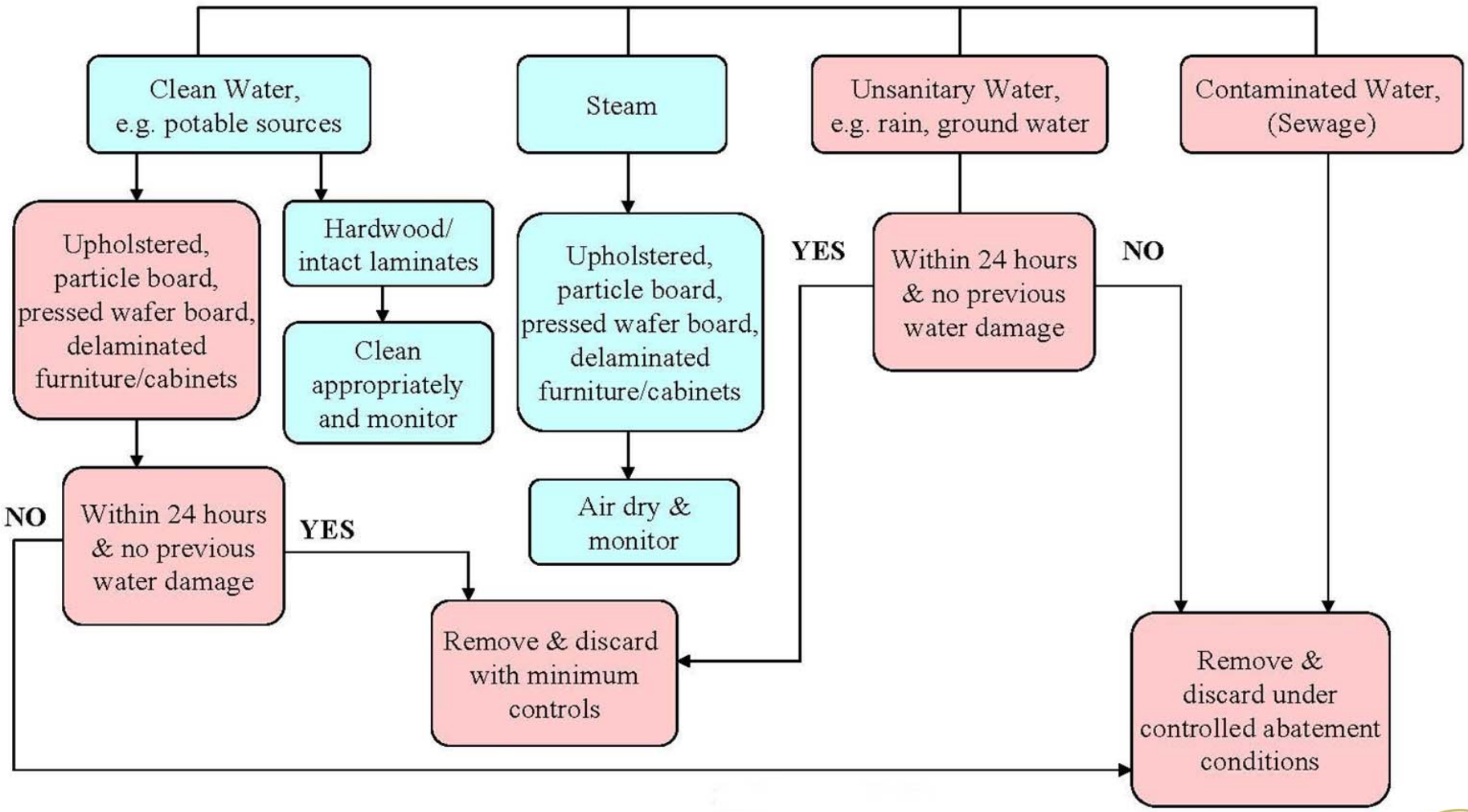


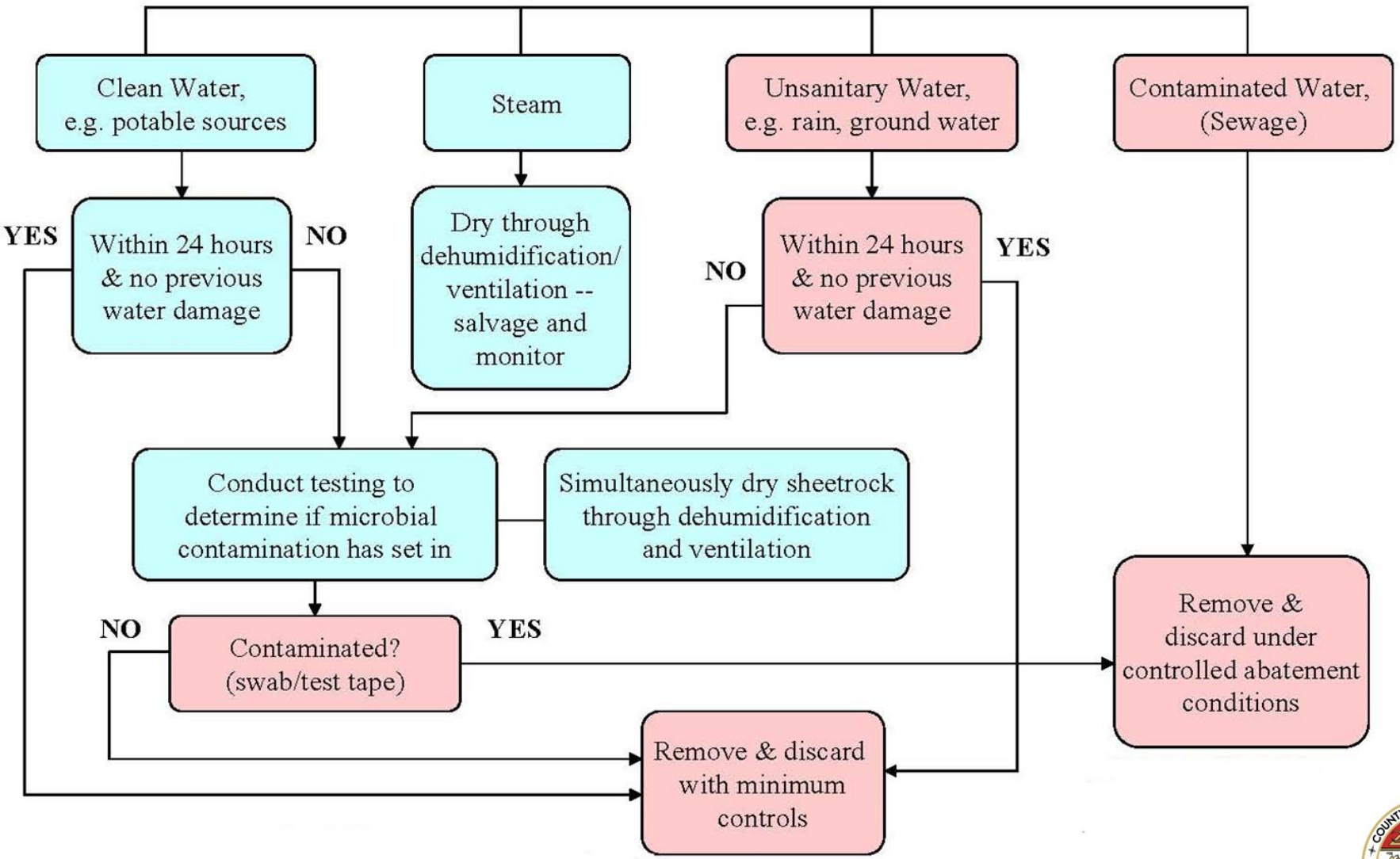
Decision Tree for: Paper/Files



Decision Tree for: Furniture/Casework

Categorize the type of water damage



Decision Tree for: Sheetrock

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