



## Water Damage Assessment & Remediation Protocol

Client Name: Peter Stadler  
Dry Source LLC Property Restoration

Property Address: 1826 N 19<sup>th</sup> St Milwaukee WI

Assessment Dates: June 19, 2020

Lab Report Date: June 20, 2020

Report Date: June 20, 2020

Inspection & Report by: Martine Davis, BBEC  
Certified Building Biologist



## Summary

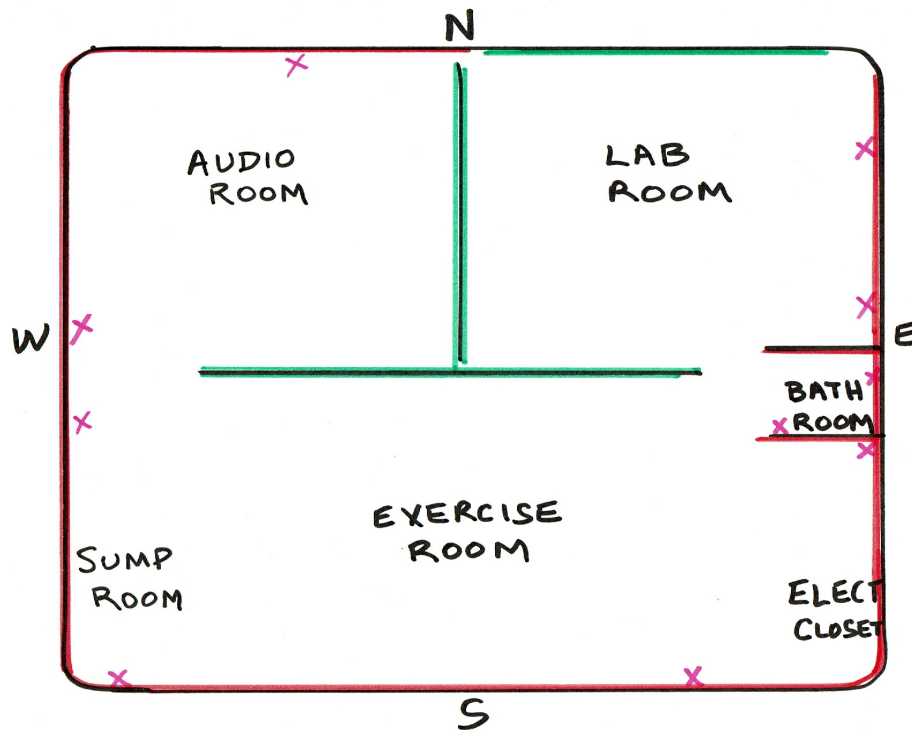
Peter Stadler of Dry Source LLC retained the services of Indoor Environmental Testing Inc. (IET) to conduct an assessment of the basement at 1826 N. 19<sup>th</sup> St. in Milwaukee, WI following a sump pump backup which resulted in flooding of the basement. Homeowner George Lewis stated that the sump pump overflowed in late May and flooded every room in the basement. The water traveled from the sump pump area in the south area almost all the way to the north wall in the audio room. The water did not travel to the interior wall between the audio room and the lab room and the interior wall (North) in the exercise room. Upon discovery, he immediately proceeded to clear the water from the floor and used fans for several days to dry the affected areas. The homeowner stated that he recently started to experience upper respiratory symptoms when spending time in the basement.

Martine Davis, BBEC, performed a visual inspection of the Basement on June 19<sup>th</sup> at which time she collected instrument measurements, and air/surface samples.

Ambient air samples were collected from the 3 main areas and from affected wall cavities as pointed out by the owner as having been reached by the sump water. Drywall in the sump pump and electrical closets were swabbed along with the underside of the laminate floor. Lab analysis indicates that mold contamination inside all wall cavities tested is severe and will require professional removal of the affected drywall and flooring. The water damage was most severe along the entire East side, encompassing the E wall of the lab room as well as the bathroom E wall and the East hallway.

## Floor Plan (drawing not to scale)

Areas in **Red** to be removed. Areas in **green** unaffected by water. Red **X** indicates wall cavities tested.





## Observations/Findings

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- Baseboards and drywall appeared dry and in good condition.
- No visible mold was observed however an odor was noted on the east side of the basement, particularly in the east hallway.
- Moisture meter measurements, along with thermal imaging of the drywall and flooring, indicated no current dampness or wetness.
- The laminate floor was warped in the audio room.
- The bathroom door and the entry door into the Audio room were warped and no longer closing fully.
- Some water damage was noted on cardboard boxes stored on the floor on the West side of the basement.

Samples were collected as follows:

- Under laminate flooring
- Drywall surface in some program and electrical closet
- East wall South end of lab room
- East Wall North end of lab room
- West wall of audio room
- North wall of audio room
- East wall East hallway by bathroom
- South wall in bathroom
- East wall in bathroom (behind toilet)
- South wall under window in exercise room
- South wall in exercise room by sump pump
- West wall in West hallway
- Audio room ambient air
- Lab room ambient air
- Exercise room ambient air
- Outdoors for baseline comparison

Lab analysis revealed mold contamination of the ambient air in the audio room and the lab room but not



in the exercise room. Occupants should minimize use of North basement rooms until mold has been removed.

Lab analysis of wall cavity samples indicates mold contamination is present in all walls tested. The contamination is particularly severe along the entire east side of the basement.

Microscopic analysis of the swab collected from underneath the laminate flooring revealed *Aspergillus/Penicillium* and *Cladosporium* molds were present along with a small quantity of mycelium which indicates growth has slowed or ceased.

These test results are consistent with penetration of water underneath the baseboard and into wall cavities during flooding.

## Remediation Protocol

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Water restoration activities with professional mold remediation are advised. They should be conducted by an experienced restoration contractor following S520 Mold remediation standards and guidelines, including but not limited to setting up plastic containment between the main floor and the basement, protecting and securing the basement content with plastic during remediation work, shutting down the HVAC system to prevent dissemination of spores to other areas of the home, using air scrubbing and negative air pressure to exhaust contaminants outdoors, etc..

- Remove baseboard on areas indicated above in Red. Baseboards may be saved if no decay has occurred but they should be HEPA-vacuumed and sanitized.
- Remove and discard bottom 4 feet of drywall on RED walls in audio room, lab room, bathroom, East hallway, electrical closet, exercise room, sump pump room, west hallway, and any storage closet located on red walls.
- Remove and discard bottom 4 feet of fiberglass insulation from exposed wall cavities.
- Remove mold growth from now-exposed framing. Continue removing drywall until no visible mold is observed then go at least 1 foot beyond.
- HEPA-vacuum now exposed surfaces including studs, base plates, masonry walls, electrical and plumbing surfaces.
- Sanitize surfaces and dry thoroughly.
- If any framing is decayed, it should be removed rather than just HEPA vacuumed. For wall bearing items with remaining structural integrity, encapsulating of surfaces is acceptable.
- Remove laminate flooring followed by HEPA vacuuming and sanitizing of floor surfaces.



- HEPA vacuum and/or damp wipe all other surfaces, including plastic containment and plastic covers used to protect content.
- Operate air scrubbers for 24 to 48 hours on the north and south side of the basement.
- HEPA-vacuum the main floor area that was used to enter and exit.
- Perform post-remediation testing to confirm the area is adequately cleaned and safe for re-occupancy.

## Appendix A. Limitations of Testing/Disclaimer

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- Please note that our sampling is only a "snapshot" of conditions and air quality at a particular point in time. Indoor Air Quality has many variables and fluctuates greatly throughout the day.
- The areas tested were selected based on the homeowner's recollection of where water traveled.
- Mold testing has limitations. Low mold counts on lab test results do not rule out hidden mold contamination in wall or ceiling cavities, under flooring, behind insulation, etc ... Also, a low mold count in one area does not rule out microbial contamination in a nearby, untested area.
- The conclusions and recommendations presented in this report are based solely on the conditions observed and tests taken at the time of the site visit, and should not be relied upon to be representative of conditions at any other time.
- We cannot make any claims regarding the presence or absence of indoor air pollutants or contaminants other than those actually tested.
- We can make no assumptions as to conditions present in rooms which we did not test.
- Mechanical and visual inspections are limited to those items to which we have physical and visual access.