



# Public Health

## Air Quality Program

October 19, 2009

Your landlord  
100 Base Street  
Anywhere, CO 80001

RE: Water Intrusion Inspection at 100 Base Street Anywhere, CO 80001

Dear Mr. & Mrs. Landlord

This is a report of the inspection I performed at 100 Base Street Anywhere, CO 80001 on 10/19/09.

### **PURPOSE/SCOPE**

To inspect a three-bedroom condominium for the precursor of mold growth, water damage.

### **BACKGROUND**

Since owning this 2-story, 3-bedroom 2 1/2 bath in 1998 you reported having experienced a number of water intrusion events all occurring in the basement play room that unit.

- In approximately 1998 the windowsill in the basement playroom leaked water into the windowsill.
- In approximately 2007 your units front step construction allowed water to seep into the ceiling of the playroom. The Home Owners Association (HOA) rebuilt the front steps and replaced some of the damaged wood and drywall ceiling.
- In 2009 Water leaked into the basement nearest the NE corner. The HOA determined two possible causes a leaking sprinkler head and a roof gutter discharge allowing water to pile up against the NE corner of the building. The HOA has started repairs by attaching a discharge extender to the gutter at the NE corner of your unit and removing drywall on the North wall of the basement playroom. At the same time the ceiling drywall patch from a previous repair was removed because it was sagging.

### **OBSERVATIONS**

#### Outside

1. The slope of the property in the immediate vicinity of 100 Base Street is towards the NE corner of the building thus the ground there remains saturated for longer periods of time following rain or snow events.
2. There was a plastic extension applied to the gutter discharging off of the NE corner of the building such that it discharges approximately 8 feet into the grass area.
3. There are sprinkler heads, shrubs, and gardens on both sides of the foundation at the NE corner.
4. The interior windowsill is not sealed at the exterior windowsill.

#### Inside, Basement playroom / bedroom

1. Repairs were under way:
  - a. The carpet was pulled back approximately 4 feet from the North facing exterior wall.
  - b. The drywall was cut and removed as a flood cut approximately 3 1/2 feet from the floor along the North facing exterior wall for approximately 15 feet until the NE corner of the room. Question why the flood cut did not extend around the corner for 4-5 feet to the South.
  - c. The ceiling at the NW corner of the room was removed exposing a hole approximately 4 1/2 X 4 1/2 feet. The wood in this area had been replaced pro a previous incident, see above. According to you this repair was to replace the ceiling drywall that was sagging. There was no evidence of water intrusion in the opened ceiling during the inspection.
2. Found drywall in the immediate vicinity of the NE corner to contain more moisture than other drywall in the unit with a moisture meter.

3. Found moisture readings in the basement floor indicating a continuing source of moisture from outside of the building.

#### **RECOMMENDATIONS**

1. Remove the gardens and sprinkler heads in the areas against the North and East walls of 100 Base Street. Replace the gardens with decorative rock.
2. Either install a French drain to daylight along the North and East walls of 100 Base Street or remove the soil along the North and East walls and paint the foundation with a concrete sealing compound. Replace the soils.
3. Seal the exterior windowsill crevice such that water cannot enter the wall.

#### **FURTHER RECOMMENDATIONS**

The following recommendations are good long-term building management practices:

1. Continually inspect your unit's bathroom shower stalls walls, under the kitchen sink and dishwasher area, and underneath the refrigerator since these areas are a high maintenance concern with most rental units.
2. Replace rubber or plastic washing machine fill hoses with metal braided hoses to prevent hose failure. Always shut off the washing machine fill hoses when leaving your home for prolonged periods of time.
3. Prior to renovations, perform analyses of the asbestos and lead content of building materials affected. Improper renovations that do not take into account the asbestos content of building materials, such as floor tile and lead content of paint, commonly lead to contamination of the living areas of structures. The Colorado Department of Public Health and Environment (CDPHE) regulates asbestos removal in single-family dwellings and rental units.
4. Conduct a long-term radon working level evaluation of the building if this hasn't already been performed. Radon is considered the second leading cause of lung cancer after smoking. Remedies for this issue can be easily applied to the building. You can obtain information concerning certified radon assessments and remediation from BCPH by calling 303-441-1180 or visiting our website at [www.BoulderCountyAir.org](http://www.BoulderCountyAir.org), or by visiting the Environmental Protection Agency (EPA) website at [www.epa.gov/iaq/radon/pubs/citguide.html](http://www.epa.gov/iaq/radon/pubs/citguide.html).

You can find more information concerning mold and Indoor Air Quality at <http://www.BoulderCountyAir.org>, open the hot link for mold.

Please do not hesitate to contact me by direct line phone number (303) 441-1566 or e-mail [mrichen@BoulderCounty.org](mailto:mrichen@BoulderCounty.org) if you want to discuss your situation further.

Thank you for calling.

Sincerely,

A handwritten signature in black ink that reads "Michael J. Richen". The signature is written in a cursive style. To the right of the signature is a vertical line.

Michael Richen, CIH  
Indoor Air Quality Specialist