

## Sewage Contamination Inspections

After a flooding event a sewage contamination inspection in residential and commercial properties has become a common occurrence to safeguard the health and well being of occupants. These inspections are a small price to pay for protecting people from the health effects that can come from being exposed to dangerous microorganisms and other contaminants.

Gastrointestinal illnesses and other adverse health effects can result from flooding in buildings when the water is contaminated with sewage. This can occur from flooding caused by sewage pipe backups, leaking sewer lines and from exterior flooding when contaminated waters enter a building.

The lists of microorganisms and contaminants that can be found in sewage and pollute a building are numerous. They range from fungi, bacteria, protozoa to dangerous viruses. Sewage, or black water, may also be contaminated with pollutants that contain residuals from medicines, household cleaners and industrial waste.

One of the main dangers from sewage contamination comes from the ingestion or inhalation of infected materials. As certain microorganisms grow they may release contaminants into the air, this is also the case when a flooded area is disturbed during post flood cleaning. Also anyone that touches any contaminated services has the risk of ingesting contaminants by touching their mouths and rubbing their eyes.

*Properly Performed Sewage Contamination Investigations Protect People & Investments*



**EMSL ANALYTICAL, INC.**  
**LABORATORY · PRODUCTS · TRAINING**

[www.emsl.com](http://www.emsl.com)

[info@emsl.com](mailto:info@emsl.com)

### LOCATIONS



**WEST COAST**  
**888.455.3675**

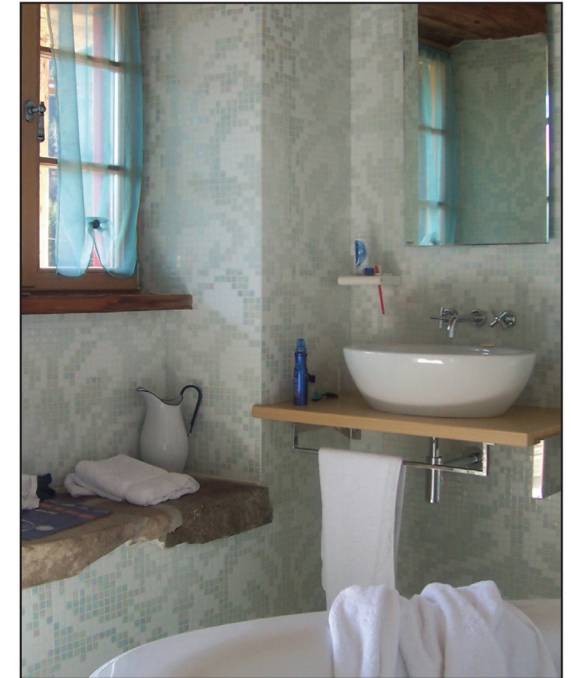
**EAST COAST**  
**800.220.3675**

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Local Services Provided by:

## EMSL Analytical, Inc. Sewage Contamination



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## Sewage Contamination

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Testing for sewage contamination after a leak or flood typically involves testing for a suite of organisms known as sewage indicator organisms. There are a host of organisms that can be associated with sewage, but there are specific organisms that can be found in high levels that are fairly unique to sewage produced by warm blooded animals.

Several of the most commonly tested **sewage indicator organisms** include *E. coli* and *Enterococci*. Both of these are types of bacteria that are typically found in high numbers in the lower intestinal tracks of mammals, including humans.

The risks associated with sewage spills include exposure to infectious microorganisms and endotoxins contained in some of the bacteria. These biological contaminants can cause gastrointestinal illness.

*Sewage contamination can often be difficult to distinguish between flooding from non-contaminated water sources. Affordable testing procedures are available by qualified professionals and accredited laboratories to determine if sewage contamination is present.*



## Hiring a Sewage Contamination Inspector

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A qualified sewage contamination inspector should be able to provide references and qualifications to the building owner or occupants.



- ◆ During a sewage contamination inspection a surface-by-surface investigation should be performed to determine if sewage indicator organisms or endotoxins are present. Air sampling should be conducted for the presence of endotoxins. Bulk sampling of affected materials and testing of any standing water should also be included.
- ◆ If sewage contamination is discovered a written evaluation describing the locations, extent of contamination and recommendations for corrective actions should be given.

*Depending on what the investigator discovers they may recommend the building owner hire a remediation contractor to remove and clean any contaminated materials that pose a threat to occupant health.*



It is important when hiring a professional to conduct the inspection that only experienced and qualified professionals perform this important task. Be sure to also verify that any samples that are taken are to be analyzed by an accredited independent laboratory such as EMSL Analytical, Inc.

## Resources

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American Indoor Air Quality Council  
[www.iaqcouncil.org](http://www.iaqcouncil.org)

California Indoor Air Quality Program [www.cal-iaq.org](http://www.cal-iaq.org)

Centers for Disease Control & Prevention [www.cdc.gov](http://www.cdc.gov)

EMSL Analytical, Inc. [www.emsl.com](http://www.emsl.com)

Indoor Air Quality Association [www.iaqa.org](http://www.iaqa.org)

LA Testing [www.LATesting.com](http://www.LATesting.com)

National Safety Council  
[www.nsc.org/library/facts/airflood.htm](http://www.nsc.org/library/facts/airflood.htm)

U.S. Environmental Protection Agency  
[www.epa.gov/mold/flood/index.html](http://www.epa.gov/mold/flood/index.html)