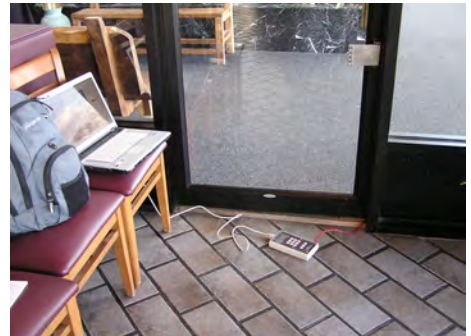
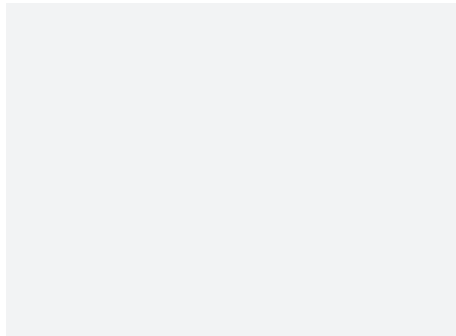
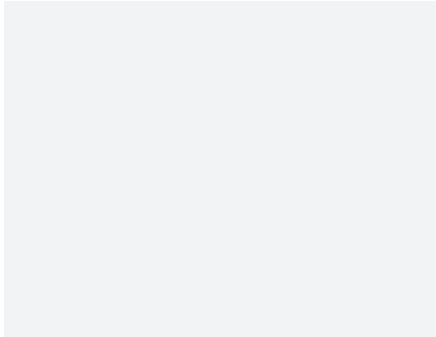




## Multi-Tenant Retail Building

New England  
2008

Investigation:  
Sewer Gas Odor



Complaints of intermittent sewer gas odors were reported in a two-story commercial building that included a restaurant and other tenant stores. BSC was retained by the building owner to help locate the cause of the odor. BSC testing to locate the odor included measuring pressure relationships between the building spaces under various conditions, reviewing a timeline of climate conditions during the time when the odor had been reported (wind speed, temperature, humidity, barometric pressure) and induced pressure differences to amplify the odor. During the investigation, a failed make-up air unit was discovered on one of the kitchen range hoods. But ultimately, the source of the odor was found in the suspended ceiling of a store adjacent to the kitchen; this location was investigated because of a measured pressure differential. The culprit was a horizontal cast iron soil pipe for second floor plumbing that had developed a crack along the length of its top side, releasing sewer gas odors when toilets were flushed, but not leaking drain water.