



GASOLINE SPILL EMPTIES OFFICE BUILDING

Background	A commercial office building was evacuated when employees reported an odor of gasoline fumes.
Our Approach	<p>The employer retained Patrick Rafferty to determine the source of the gasoline vapors and devise a plan of action.</p> <p>The initial investigation included direct-reading measurement of indoor air quality indicators and organic vapors. An inspection of the exterior of the building indicated signs of a gasoline spill cleanup at an adjacent mini-mart. Discussions with Pennsylvania Department of Environmental Resources (PA DER) confirmed that efforts were underway to mitigate a catastrophic release of gasoline from an underground storage tank.</p> <p>He worked with the facility manager to use the ventilation system to pressurize the building to reduce vapor intrusion, and to ventilate the building with outdoor air.</p> <p>Air samples for benzene, toluene, and xylenes (BTX), and other volatile organic compounds (VOCs), were collected before and after the mitigation measures were implemented, using NIOSH, OSHA and EPA sampling methods, including the use of SUMMA canisters.</p>
Benefits and Added Value	Mr. Rafferty worked closely with the employer, facility manager and geotechnical consultant to ensure that the building could be reoccupied as quickly and safely as possible. Our work provided the employees with assurance that the effects of the gasoline hazard had been mitigated.