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William Brodhead,
President of: WPB Enterprises, Inc.

PROFESSIONAL COMMERCIAL EXPERIENCE & RESEARCH WORK

- 1/84-pres. WPB Enterprises has 5 employees and has completed over 6000 radon mitigation systems including mitigating the highest residential radon level in NJ, 2700 pCi/L., a house in Reading, PA with 1800 pCi/L., and a new home in Easton PA with 1400 pCi/L.
- 11/89-pres. Primary instructor for Radon Technology for Mitigators 3 day course given five times a year and sponsored by the Eastern Regional Radon Training Center at Rutgers University.
- 2007 Hired by Goss International to design soil vapor intrusion mitigation system for 235,000 square foot manufacturing plant in Dover NH.
- 2007 Developed and taught 8 hour continuing education class at International Radon Symposium on designing and installing soil gas mitigation systems in commercial buildings.
- 2007 Hired by CH2M-Hill to design soil vapor intrusion mitigation systems for 14 buildings in Grants, New Mexico as part of super fund clean-up site.
- 2007 Hired by Northwestern School District to design radon mitigation systems for two elementary schools and design passive radon piping for two large additions.
- 2006 Hired by Earth Tech a division of Tyco to install of 11 vapor intrusion mitigation systems for TCE/PCE in residential homes in Akron, PA
- 2006 Installed 150 mitigation systems for US Army housing at Fort Campbell, Clarksville, Tennessee
- 2006 Hired by CH2M-Hill to supervise an additional installation of 22 radon mitigation systems at Kadena Air Force Base, Okinawa, Japan
- 2005 Designed and installed radon mitigation system for St. Lukes Hospital, Allentown, PA
- 2005 Designed and installed a radon mitigation system for a half million square foot warehouse outside of Allentown, PA
- 2005 Installed Sub-Slab Depressurization system for a branch bank near Scranton, PA to eliminate soil based odors.
- 2005 Presented paper titled "The Effect of Ventilation Changes on Radon Decay Product Measurements" and an update on the "New Jersey Radon Resistant School New Construction Code" at the 15th Annual International Radon Symposium in San Diego, California
- 2005 Hired by US DOE to mitigate 110 housing units for the US Navy in Guam.
- 2005 Hired by CH2M-Hill to supervise the installation of 24 radon mitigation systems at Kadena Air Force Base, Okinawa, Japan.

- 2004 Presented paper titled "Draining Water past Radon Fan Motors installed Outside" and "Proposed New Jersey Radon Resistant School New Construction Code" at the 14th Annual International Radon Symposium in Newport, Rhode Island
- 2003 Hired by CH2M-Hill to evaluate the existing 600 radon mitigation systems at Kadena Air Force Base, Okinawa, Japan and to provide guidance on radon testing procedures and crawl space depressurization induced moisture problems.
- 2003 Presented paper titled "Using ASD to mitigate CO₂, Methane and Benzene" at the 13th Annual International Radon Symposium in Nashville, Tennessee
- 2003 Hired by NJ DEP to produce the teaching materials and teach a one-day class instructing mitigators how to diagnose and design radon systems for NJ schools with elevated radon.
- 2002 Presented paper titled "Designing Commercial Sub-Slab Depressurization Systems" and a paper titled "Performance of Low Wattage Fans & Small Pipe Sizes with ASD Systems" at the 12th Annual International Radon Symposium in Reno, Nevada
- 2002 Hired by University of Minneapolis as a sub-contract to the EPA to re-write "Active Soil Depressurization" section of the radon mitigation-training manual used by the EPA sponsored training centers.
- 2002 Hired by BWXT Y12 to do radon diagnostics and assist in the design of radon mitigation systems for the US Navy in Okinawa, Japan. Eighty-five radon systems were installed during a second four-week trip with five, two man crews. All re-tests were below the EPA radon guideline level.
- 2001 Hired by BWXT Y12, a division of Oak Ridge National Laboratory, to mitigate over 250 homes for the US Navy on the island of Guam. Work was accomplished in two, four-week periods with five, two man crews during the first trip and two crews during the second trip.
- 2000-2003 Hired by United States Office of Surface Mining to mitigate six homes that had excessive amounts of CO₂ entering the basement.
- 2000 Hired by Lockheed Martin Energy Systems to mitigate 50 homes for the US Navy on the Island of Guam. Work was accomplished in one four week period with two crews of two each. WPB provide tools and labor.
- 1999 Installed radon system for Cold Spring Elementary School, Central Bucks School District
- 1999 Hired by Montgomery County to install a mitigation system at the underground Montgomery County Emergency Operations Center (911 Center)
- 1998 Installed radon system for Lehigh Elementary School, Northampton Area School District
- 1997-8 Hired by Oak Ridge National Lab to mitigate 100 housing units for the US Navy on the island of Guam. Radon levels were in some cases over 100 pCi/L. Three trips were made to Guam with three to four individuals during each trip. Oak Ridge provide scheduling and materials.
- 1997 Co-authored a paper for the International Radon Symposium in Cincinnati, OH on "Airflow and Pressure Characteristics of Common Radon Fans".
- 1996 Authored and presented a paper at the International Radon Symposium in Orlando Florida on "Pressure Drop of Airflow through commonly used Radon Mitigation Piping".
- 1995-6 Hired by EPA to provide building measurements, radon mitigation diagnostics and recommended mitigation plan for the Large Building Research Project at the 45,000 square foot, four-story Reading State

Office Building.

- 1995 Hired by the US Army to provided diagnostics and radon system recommendations for Fitness Research Institute Building at Carlisle Pennsylvania Army Facility.
- 1995 Hired by Bryn Mawr College outside Philadelphia to mitigated 4 story teaching facility.
- 1994 Hired by environmental company to provided diagnostics and specifications for remediation of 4 story office building in Chicago, IL
- 1989-94 Hired by EPA to helped develop and review EPA radon measurement and mitigation exam questions.
- 1992-93 Hired by PA DER/DEP to investigate radon test tampering using all commonly used radon and RDP equipment. Presented paper on "Radon Test Tampering" at 1994 International Radon Symposium in Atlantic City, NJ.
- 1992-94 Hired by NJ DEP to be the principal field investigator of 100 NJ homes previously mitigated for radon. Completed four quarterly measurements in three locations in each home. Installed additional mitigation work in fifteen of the 100 NJ houses that were still elevated above 4 pCi/L.
- 1991 Authored and presented a paper at the International Symposium on Radon and Radon Reduction Technology, Philadelphia, PA titled "Unit Ventilator Operation and Radon Concentrations in a Pennsylvania School".
- 1990-91 Instructor for Honeywell Radon Contractor Program for HVAC installers in St. Louis, Milwaukee, and Gary.
- 1989-90 Designed and implemented the mitigation system for a school in NJ that had radon levels as high as 200 pCi/L
- 1989 Designed successful mitigation systems for newspaper facility in PA and six NJ State Police Headquarters. Mitigated two schools in PA.
- 1987 Installed radon mitigation systems for 7 of 14 houses for a joint project between Princeton University and Lawrence Berkley Laboratories.
- 1986 Installed the radon mitigation systems for a 10 house EPA sponsored study in Clinton, NJ
- 1979-89 Sole Proprietorship of custom home building company specializing in design and construction of energy efficient and solar homes. Built 25 custom homes.