Appendix B

Background on Fire Exposure at the Anne Arundel County Fire Training Academy
Training Academy Background

The following description of the training fires at the Anne Arundel County Fire Department Training Academy is based on interviews, the public and group meetings, and materials provided by the Fire Department and other sources. Some of the information was conflicting as to the period during which the PCB-contaminated fuel was used.

All fire fighters intending to join the Anne Arundel County Fire Department (AAFD) would train for approximately 12 weeks at the Anne Arundel County Academy’s training facility. According to fire officials, the training facility was opened in 1969 and is still in use today; this was confirmed in interviews with former fire fighters. While at the Academy, students trained using various set-ups that simulated live fire scenarios. These mock-ups included: 1) a circular pit 25 feet in diameter filled with a one-half inch thick layer of immiscible flammable liquid on water; 2) a mock-up railroad car; 3) a structure of pipes around a tank that spewed oil which was subsequently lighted (termed the “Christmas Tree”); 4) and a burn building (termed the “Doll House”). Each of the previously mentioned training devices served a unique role in the training of fire fighters. The primary purpose of the pit was to give students the experience of intense heat without the use of breathing apparatus (not required until early 1980s). Oil and excelsior (a type of packing material) were used in the “Doll House” to simulate a smoky environment. The “Christmas Tree” sprayed oil. Students would allow the fire to burn and then were ordered to put it out. During the 12-week training approximately 2 days were spent extinguishing training fires in the pit and/or dollhouse. Additionally, County
Fire fighters returned to the Academy periodically for further training and the facility was reported to be used by fire fighters from other jurisdictions.

Initially diesel fuel was used as fuel for these mock-ups, but in 1971 BGE (then Baltimore Gas and Electric) donated oil in exchange for training for their fire fighters at the training facility. By some accounts, PCB contaminated oil was used from 1971 to 1979, although a date from 1970 to 1984 was also reported. Use of PCB contaminated BGE oil ended in 1979, but PCBs might have persisted in the apparatus for a longer period of time. Use of other oil as fuel, but not from BGE, continued until 1986 when the pits were removed and carted away.

During these training days, fire fighter recruits and others would be exposed multiple times to fires of several minutes duration. According to Fire Department officials, every student had at most one hour of fire exposure over a training week. Among the fire fighters interviewed with the telephone questionnaire, most reported participating between 6-50 times in live fire training exercises. Several instructors reported greater exposure (more than 50 times) to live fire training exercises. Exposure included breathing in the smoke from the pit fire, dermal contact from cleaning the pit, and from oil splash. Fire fighters anticipated the training fires as an opportunity to demonstrate their abilities. While putting out the pit fires, fire fighters reported (through interviews) that recruits had minimal protection and no breathing apparatus, as we were told that a breathing apparatus was not required until the early 1980s. Some reported not cleaning their uniforms regularly so that clothing may have been a route of exposure to the oil used for the fires.
Other fire fighter groups, reportedly Anne Arundel County Volunteers, Annapolis City Fire Department, BGE fire fighters, Fort Meade Fire Department, Howard County Fire Department, Maryland Fire and Rescue Institute (MFRI), Maritime Institute fire fighters, Naval Academy Fire Department, and Prince Georges County Fire Department were also trained at the Academy. Information from former fire fighters suggests that approximately 2000 fire fighters from different jurisdictions were trained at the Academy during the time period 1970-1984. Different sources indicated that from 500 to 800 Anne Arundel County firefighters trained at the Academy during the time period in question. The Academy is still in use today.