

Case Study:

Contaminated School Building Material Management

Massachusetts Public School

Situation



When an older wing of a Massachusetts public school was slated for renovation, testing for the presence of hazardous compounds in building materials was conducted by a local area consultant. As the wing of school had been constructed during a time in which polychlorinated biphenyls (PCBs) were widely used, this compound was of particular concern. Air tests and wipe samples came back positive for both PCBs and asbestos, verifying the presence of the chemical in concentrations in the parts per million (ppm) at levels higher than those allowed by the federal EPA. The town sought out Triumvirate Environmental to assist with the remediation process.

Action

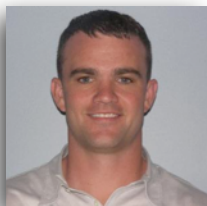
Triumvirate entered the scene, working in conjunction with the external consultant to identify the potential source of elevated PCB-levels in air. Triumvirate's field service team removed approximately 120 leaking light ballasts before retesting the air. When the retest revealed that PCB levels were still high, it became apparent that PCBs were likely to be present in building materials. Further testing demonstrated that regulated levels of PCBs were present in the caulking around windows and construction joints, both outside and inside the building. As a result, the impacted classrooms, the cafeteria, and the kitchen in this wing of the school were quarantined, pending remediation of the hazardous materials.

Triumvirate conducted a pilot test in two of the twelve rooms, removing and disposing of 14 windows, as well as encapsulating the remaining substrate, door frame caulking, and construction joints with an epoxy-based paint as an additional precautionary measure. In addition to disposing of and encapsulating potentially-contaminated materials, Triumvirate decontaminated all surfaces of the room and Univents within. Following surface cleaning, retesting of the pilot rooms revealed PCB concentrations in the air that were within the reference dose as outlined by the EPA. This successful remediation procedure was then applied to the remaining rooms of the school.



Result

Triumvirate successfully remediated the indoor air quality throughout the affected areas. Work was completed within the given budget constraints, and classrooms and common areas were released for reoccupation within the predetermined time limit of two weeks. Triumvirate managed the situation with the utmost discretion in order to prevent a public perception issue. Due to the efforts of Triumvirate's field service team, the school achieved indoor air quality compliance as decreed by the EPA's Toxic Substances Control Act (TSCA).



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