

Lead Paint Inspection



Client: Private company, Kennett Square PA

Description: Brownfield Science & Technology, Inc. (BSTI) provided technical lead assessment services to the owner of a structure undergoing renovation. The structure was built in the late 18th century and required substantial renovation prior to occupation. Due to the age of the structure, lead-based paint (LBP) was presumed to be present.

A lead paint inspection is a surface-by-surface investigation to determine whether there is lead-based paint in a structure or child-occupied facility. Inspections can be legally performed only by certified inspectors or risk assessors.

BSTI's objectives were to help our client to understand the level of screening appropriate and to provide documentation to guide the on-scene construction workers. After some careful consideration, BSTI's client opted for a modified lead-based paint inspection that incorporated a combination of field screening and sample collection.

During the inspection, components in each room as well as some exterior components were surveyed for the presence of LBP using a portable X-ray fluorescence (XRF) spectrum analyzer. A total of 136 XRF paint readings were taken and catalogued using in-system data capture. After testing with the XRF was completed, the inspector collected dust "wipe" samples to determine the quantity of lead in the dust throughout the structure. The results of the XRF testing confirmed that lead-based paint was present on both interior and exterior surfaces. The dust wipe samples also showed that lead dust levels were present above EPA/HUD guidelines.

As a result of the modified approach, the client was able to prioritize and scale mitigation activities to assure protectiveness of human health while maintaining their budget. BSTI was able to define the remaining, less significant risk factors within a context that was understood and therefore manageable to our client. Our client subsequently moved forward with their intended plans for the property.

Objective:

Provide actionable data mid-construction to inform and prioritize lead-based paint mitigation measures.

Services:

- Environmental Consulting
- Lead Paint Inspection
- Industrial Hygiene
- Lead Dust Sampling

Applied Science/ Equipment and Materials:

- XRF Analyzer
- Lead Wipes
- Data interpretation

