The Challenge

Manufacturing facilities that have been in business for 35-100 years operate in buildings containing asbestos and hazardous materials. These may degrade to a point where employees are exposed to dangerous levels of toxins and/or the surrounding environment is contaminated. These problems cannot be ignored. In some cases, a situation arises requiring extraordinary measures to eliminate these hazards altogether.

When regulatory agencies inspected a paper mill, the General Manager became concerned that the delaminating paint on his 250 foot chimney stack might be lead based. Laboratory analysis confirmed not only that the paint contained lead—but asbestos also. This paint was peeling away in thousands of pieces, littering the mill property and threatening to contaminate a nearby river.

Constructed in 1926, the concrete chimney stack had been banded with turnbuckled, steel straps every 20 feet to add stability. Now the structure was developing fissures that allowed moisture to form beneath the paint increasing the delamination. The twenty-five-story chimney stack needed to be abated of all asbestos/lead based paint in order to repair the structure and fit it with additional bands.

The close proximity of State waters and a nearby residential neighborhood were additional considerations. To do nothing was not an option. The consequences of inaction would be severe and costly.
The Yankee Solution

Ultra High Pressure Water Jetting (UHP) is a process for removing paints, coatings, and other materials from vertical and horizontal surfaces at pressures exceeding 40,000 psi. Yankee’s well-trained employees and state-of-the-art enclosed UHP mini-scrubber abatement techniques allow for fast, 100% removal of the paints and coatings from a myriad of surfaces without contaminating the surrounding environment.

This Yankee system attaches to the working surface with a powerful vacuum and shrouds the high-pressure jets. The jets remove the paint and waste from the surface and the vacuum removes and collects the paint and wastewater in enclosed tanks. The water is filtered to separate the solids then deionized and recycled to the jets. This process also protects our employees from exposure to airborne contaminants and the high-pressure water jets.

The need for costly scaffolding and containment enclosures is eliminated. In this case, the concrete chimney substrate was left in a condition where the structural defects can be detected and repaired—in a matter of weeks. The smooth porous concrete finish will absorb the new coats of paint ensuring a durable adhesive bond that will last for decades. From start to finish, the job required less than three weeks.

In contrast, conventional, labor-intensive methods such as power washing or hand-scraping would take months to complete. Conventional systems would also remove far less than 100%, and are not practical to use during the winter months or at heights with high winds and freezing temperatures.
Yankee Fiber Control is one of New England’s oldest and largest environmental / specialty contractors—but we’re also one of the most innovative. Our highly experienced team is committed to improvement, and so we’re constantly learning and developing new solutions. Under one roof, we’ve gathered a team equipped with today’s most sophisticated methods and technologies—so they can respond quickly and effectively to your contracting needs. We’re a privately owned business with over twenty years expertise in servicing our customers, including residential, commercial, industrial, and institutional sites such as hospitals and universities. If you need help with any environmental / specialty contracting issues, large or small, call us. We can help.

Yankee’s Core Services
Specialty Abrasive Blasting, Asbestos & Lead Abatement, Industrial Cleaning and Industrial Coatings, Air Duct Cleaning, Commercial and Residential Drying and Mold Remediation. For information, please call or visit our website.