ABSTRACT

Sustainability is a concept that is increasingly accepted as a foundation for professional practice, and the toxicity of materials is gaining concern. While the topic of material toxicity is generally addressed with regard to new materials, there is a history of in-situ substances embedded in the built environment. This subject of inherited toxicity is a critical one to confront; yet it is scarcely addressed by the preservation profession and the building industry at large. Considering the potentially negative implications that 20th century building materials could have on public health and the environmental, this topic will grow more critical to broach in coming years.

In response to the increasing regulation of copper in both Europe and the US, a material case study of architectural copper was executed. The building case study conducted at Frank Lloyd Wright’s Price Tower (1956) is an exploration of whether or not an acute environmental impact from the building’s exterior copper elements exists, the results of which are assessed based on an expanded toxicology of copper.