

Creosote Worker Exposure Study

Patrick Stark
Stella-Jones Corporation
Pittsburgh, PA

Abstract

This paper will describe the procedures and methods used to reduce exposure -- dermal and vapor/air -- to workers in creosote wood treating facilities. A comparison is made between an original worker exposure study conducted in 1998 and one recently completed in 2016.

Stormwater in Production Areas: Understanding the Risks of Chemical Benchmarks Becoming Regulatory Standards

Maureen Hodson
Bruce Martin
EHS Support
Portland, OR

Abstract

Careful planning and proactive strategies are essential to ensuring regulatory compliance and limiting long-term risk in managing stormwater discharges at wood treating facilities. This presentation will cover the historical, current, and potential future trends in regulating stormwater discharges of key chemicals of concern in the industry, including Copper (Cu), Arsenic (As), Chromium (Cr), and Total Suspended Solids (TSS). In addition, the presentation will cover best management practices and proactive approaches to addressing control of these parameters.

Investigations of the wood treating industry by regulatory agencies under the newly-formed Clean Water Act in the 1970s led to identification of contamination from stormwater discharges and other sources. Agencies reacted with increased enforcement, often resulting in costly investigation and remediation of sites under the Resource Conservation and Recovery Act (RCRA). Current CWA regulation of stormwater discharges is generally accomplished through the federal Multi-Sector General Permit (MSGP) for Industrial Stormwater, most recently issued in 2015. For the Wood Preserving sector, facilities are required to monitor stormwater for certain parameters, and compare the results to “benchmark” values. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. However, if an agency requires corrective action as a result of a benchmark exceedance, failure to conduct required corrective action is a permit violation. Exceedances of benchmark concentrations for parameters at wood treating facilities, especially Cu, As, and TSS, are common and pose a growing risk of increased scrutiny and enforcement for the industry.

As the regulation of stormwater discharges evolves, the Environmental Protection Agency (EPA) and state regulatory agencies are looking at ways to improve the regulation of industrial stormwater. The National Academies of Science, Engineering, and Medicine (NAS) is currently providing input to the EPA as it revises the MSGP for industrial stormwater. Upon completion of a study currently underway, the NAS committees will suggest improvements to the current MSGP benchmarking monitoring requirements; evaluate the feasibility of numeric retention standards (such as volumetric control standards for a percent storm size or standards based on percentage of imperviousness); and identify the highest priority industrial facilities/subsectors for consideration of additional discharge monitoring. Given the apparent increased regulation of stormwater discharges in the near future, it is critical for the industry to take a proactive approach to its stormwater management practices.

Current stormwater management practices at wood treating facilities consist of a variety of best management practices, as well as both passive and active treatment technologies to limit discharge of pollutants in stormwater. The final portion of the presentation will explore the practices and technologies that have been effective in controlling discharge of pollutants in stormwater discharges from Wood Treating facilities, as well as the cost implications. Like any business risk, the risks posed by stormwater quality at facilities can be mitigated through proactive planning.