

Management of Wood from Site Clearing and Storm Debris

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Background/Objectives. The Superfund program has increased its focus on the environmental footprint of cleanups through EPA's Office of Land and Emergency Management's (OLEM's) Greener Cleanups policy, Superfund's Green Remediation Strategy, and individual regional green remediation policies, such as EPA Region 2's Clean and Green Policy. Region 2's green remediation program has grappled with the issue of wood waste generated during contaminated site cleanup activities. In addition, natural disasters can generate large amounts of vegetative and woody debris that present challenges in post-generation management. Hurricane Sandy, for example, generated more than 168,000 cubic yards of woody debris in New York City alone. Research focusing on organics management from municipal solid waste (MSW) and wood management from construction and demolition (C&D) is available; however, there is no product that is strictly dedicated to land-clearing and site cleanup. The objective of this project was to evaluate a variety of wood management options from a cost and life-cycle assessment (LCA) perspective to help decision-makers identify tradeoffs between options.

Approach/Activities. A literature search identified options for wood management and data characterizing the cost and environmental aspects of the options. The results were compiled in the report *Management of Wood from Site Clearing and Storm Debris* (under review) that enumerates and summarizes quantitative data from the literature for the targeted metrics of cost, GHG emissions and energy consumption for different wood management options. A flow chart and checklist were created to help decision-makers weigh various wood management options for a given set of scenarios, focusing on site remediation and NetZero communities of practice. Approaches are provided to combine the information from flow chart Steps 1–3 to synthesize what was learned and narrow in on what may be the best option or options for managing the wood from a project site.

Results/Lessons Learned. The feasibility and preferability of options for managing wood from site-cleanup and land-clearing projects will vary depending on a site's size, quantity and type of wood, and site location. Each project site must consider multiple decision criteria or factors when determining ways to best manage wood and identify options that meet its needs, as well as regional needs. Further research is needed to better understand and refine decision-making guidance for wood management specific to land-clearing and site cleanup. Cost data for potential wood management options is limited and there are few dedicated life-cycle or environmental studies for land-clearing and site cleanup operations. Research is necessary to conduct an LCA for wood management options that is specific to site cleanup and land-clearing operations.