

Hurricane debris removal: A full scale waste issue (</8568759/index.php/news/waste-news/2719-hurricane-debris-removal-a-full-scale-waste-issue>)

Waste (</8568759/index.php/component/tags/tag/11-waste>)



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The recent hurricanes that devastated dozens of U.S. communities have left a path of destruction for hundreds of miles.

In fact, one of the most common images shown in the media are those depicting neighborhood streets with piles of trash, construction debris, and environmental storm waste overflowing from destroyed neighborhoods. But how is this debris handled and what are the biggest issues facing waste collection companies handling this level of waste?

According to Maricha Ellis, vice president of marketing and sales operations at Stericycle Environmental Solutions, the biggest issue right now is the sheer volume of debris following the aftermath of three major hurricanes.

“It can be challenging when local municipalities communicate with the public regarding what to do with their waste. It is also challenging to determine where we can set up waste collection consolidation points,” Ellis said.

In Houston, Stericycle Environmental Services is currently performing neighborhood curbside pickups of hazardous waste, as well as performing soil sampling at temporary collection sites to prevent ground water contamination. Stericycle works to minimize or prevent the chances of toxic or other hazardous material entering into the environment.

It is not surprising that adaptations must be made on the part of waste companies with regard to waste handling and recycling of hurricane debris.

Most importantly, waste companies need to be able to ramp up personnel in short order when it comes to handling hurricane waste.

“Our biggest challenge in this area is finding good, reliable general laborers who are willing to complete the curbside pickups,” Ellis said. “We reallocate our personnel, as well as add personnel to curbside services and door-to-door hazardous waste pickups. We have to bring more people, equipment and storage into the area to support the additional work.”

Larry Kemp, chief operating officer for Kemp and Sons General Services, an environmental cleaning company in Fort Worth, Texas, believes the best course of action is to incinerate as much as possible to mitigate future problems.

“You simply don’t know what you have. When you have contaminated water touching all aspects of life, that’s a recipe for disaster,” Kemp said. “I know cities are trying to clean up as quickly as possible; however, I would encourage them to slowly conduct safe and efficient collections throughout the affected areas.”

Kemp and Sons has acted as a consultant, giving advice, counsel and training on the handling of hazardous materials, contaminated debris and bodily fluids. They’ve also educated personnel on the risk of human exposure to germs, blood borne pathogens and diseases related to disaster areas and the possibly dangerous outcomes to all involved.

For Kemp and other environmental and waste management companies, the sheer size and vastness of hurricane debris is another challenge facing the affected areas. Most cities and locales simply aren’t equipped to address natural catastrophic events. This is the reason that such incidents are classified as federal disaster areas – to secure assistance from the government and have access to finances, personnel, equipment and unlimited resources. Of course, the challenge is that not everyone assisting with this process is properly trained.

“Determining what to do with all the debris, trash and contaminated items, and the proper disposal of such items is greatly challenging,” Kemp said. “That’s why it’s important to implement a debris management plan that sets forth guidelines for managing and disposing of disaster-related debris and have an organized, environmentally friendly plan for its placement or disposal.”

As a result of Hurricane Irma, debris has been overwhelming waste handlers and municipalities who are trying to handle the collecting and handling process. However, the collection process has been painstakingly slow and so many residents of Central Florida are taking the process into their own hands. Rather than depending on government-funded storm debris cleanup options, residents are hiring crews with trailers, landscapers with empty truck beds, or others with the appropriate vehicles to get the debris to the free drop-off locations dotting the region. However, the safety and wellbeing of novices handling contaminated debris is of great concern.

According to the Orlando Sentinel, more than 35,000 people have taken debris to the sites since the first one opened on September 13. They’ve dumped more than 75,000 cubic yards. In order to qualify for FEMA reimbursement, in Sarasota County, only loose and bulky vegetative debris is being collected by the debris contractor.

In storm ravaged Houston, where in August, Hurricane Harvey resulted in miles of flooded neighborhoods throughout the metropolitan area, neighborhoods are still grappling with storm debris littering their curbs, sidewalks, driveways, and causing the narrowing of streets. As debris invades the streets, large waste handling trucks aren't able to get down those streets to collect the waste. This is problematic as officials estimate that Harvey could produce 200 to 300 million cubic yards of debris in Texas. As a result, the Texas Commission on Environmental Quality (TCEQ) has established more than 100 sites across the region where Harvey hit as Temporary Debris Management Sites. Some of these locations are already landfills; others are industrial areas that can accommodate large commercial trucks. All locations are managed by local authorities.

Kemp stressed that there's no separation of contaminated goods at this point. Collectors are dealing with a mixture of bodily fluids, contaminated water, household trash, batteries, waste, refrigerators and much more. According to reports, various hazard sites in the Houston area were underwater, which is also something collectors may have to deal with.

In fact, according to Kemp, all rules and regulations related to the separation of trash, recyclables and other items are out the window.

"It's nearly impossible to be done correctly," Kemp said. "I think it would take nearly five years to sort all the items being collected throughout the region. Cities are trying to get back to normal and, as I mentioned, incinerating everything collected would ensure that workers, residents and the environment are as safe as possible."

"Once gathered, there needs to be a designated hazardous waste area – one that's been identified to accommodate the waste loads," Kemp said. "The goal is to dispose of it in a manner that protects human lives, and preserves our environment and air quality."

And while not a lot of hurricane debris can be recycled, due to cross contamination and exposure of debris to various elements that can be harmful to public health, safety and welfare. Ellis says it is possible to recycle some of the paints, metals and electronics.

The cleanup process, in an area designated a federal disaster area, is a long and lengthy process and at the very minimum it takes months, but in most cases it takes many years and possibly a decade. It depends on the damage of property, negative impact on infrastructure, and the severity of the storm in its length.

"The scope of this cleanup is unprecedented," Ellis said. "But we cleaned up Galveston for almost a year following Hurricane Ike."