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HETI Horizons

Hurricane Pollution Damage Allocation

Harvey, Irma, Jose, Maria, Nate, Bret, and Franklin. This may be a roster of ordinary student names in any classroom in the United States. But over the last several months, these names, unfortunately, have become synonymous with the most intense tropical storms in modern history – packing winds of up to 160 miles/hour, carrying trillions of gallons of rainwater, and leveling anything standing in their way.

Most recently, we have witnessed examples of the damage impacts from Hurricanes Harvey and Maria, each with their different behavioral and intensity characteristics, which created destructive forces along the Gulf Coast of Texas, Puerto Rico, and Dominica – causing massive flooding, erosion, mud-slides, and wind-blown damages. Initial assessments revealed catastrophic damages to Dominica, leaving the island virtually uninhabitable with an island-wide electrical/communications blackout, widespread flooding, and leveled homes. Similarly, in Puerto Rico, more than 85% of the island was left without electric power and infrastructure destroyed with its 3.4 million residents unsure what their future holds.



Hurricane Harvey, likewise, produced more than 40 inches of rainfall in Houston, causing catastrophic flooding – the wettest tropic cyclone on record in the U.S.. The combined forces of Maria and Harvey alone inundated hundreds of thousands of homes, displaced more people than former wars, and prompted more than 17,000 rescues. The human toll and suffering has been described as "apocalyptic' and will be felt long after the hurricanes dissipate. It will be years before families can rebuild their

lives and property – exceeding \$180 billion (U.S.), the costliest hurricane season on record.

Exposure and Secondary Pollution Layering

In the aftermath of the hurricanes, insurance carriers with exposure in these areas will begin the slow and methodical claim service work necessary for coverage analysis and claims handling throughout the project lifecycle to restore covered losses to pre-existing conditions. Significant challenges will be faced by carriers, insureds, and their consultants/adjusters in understanding the full extent of the damages and how to map and allocate observed damages to the root cause(s) – whether wind-blown or flood-related. The reasonable and necessary cleanup costs will need to be "bucketed" to specific coverages and policies – considering underlying exclusions, endorsements, and the interpretation of policy language. While Hurricane Harvey brought massive flooding and overland runoff damage as a slow moving storm, Maria was a faster moving storm with more wind-blown damages – making coverage decisions unique depending upon the storm characteristics.

Complicating matters more is incremental layering of uncontrolled/unintended secondary events not immediately caused by the hurricane itself that may add, modify, or co-mingle the original damages or pollution. For instance, secondary layering from dam failures, mud-slides, tremors, rip-tides, sewage, and petroleum releases that did not happen directly as results of the original hurricane may occur – causing both chemical and biological contaminants to be released within the original footprint of damages. Petroleum, bacteria, polycyclic aromatic hydrocarbons (PAHs), viruses, sewage, *Legionella*, asbestos, and other pollutants can sometimes cause secondary layering and may override or alter the planned primary direction and drivers for cleanup – depending on the risk to human health and the environment.

Exposure and Secondary Pollution Layering [continued]

For example, during Katrina (August 2005), many structures were flooded first from rainwater events; however the floodwater picked up suspended contaminants containing heavy-metals from adjacent soils which entered homes and affected finished interior building components. In addition, the floodwaters created standing pools that came in contact with chemical plants, petroleum refining facilities, dry cleaners, service stations, and exploration and production facilities that added additional layers into the "soup" of damages.

With Hurricane Hermine (August 2016), secondary layering pollution events occurred when asbestos materials (managed-in-place) became disturbed when a retainage wall failed and homes became flooded with sewage, heavy metals, PAHs from sediment in floodwaters, and sewage (bacteriological) damages. Because asbestos regulations/protocols and cleanup became the primary cost driver for remediation, identification of the specific areas impacted by asbestos-containing material (ACM) disturbance became critical to the identification of the secondary contaminants of concern and eliminating areas of non-disturbance was critical in providing a sound cost-effective strategy for cleanup.

Challenges to Data Collection and Allocation

When insureds are dealing with catastrophic events, the last thing they want to deal with is requests for information from their carriers as many are under critical timelines and compressed schedules to minimize business interruption. For emergency response operations, crews are typically working two 12-hour shifts, seven days-a-week to bring the property and operations back to life. But still, insurance carriers are part of the equation and the collection of data from the site is critical in understanding initial coverage analysis and how the policy will respond to the damages.



Many disagreements may arise in the field on how to capture and map damages and who is responsible. Vendors may also complicate the picture as they march to their own industry standards/guidelines and may not understand the needs of the claims analyst. One lesson learned is that carriers must insert themselves in the process early-on and maintain communications throughout the claim. Having "boots on the ground" early and an independent set of eyes to orchestrate may occasionally be needed to assure that a

consistent data-driven collection process is set-up and maintained throughout the project – collecting the type of data that is critical to carriers in making informed decisions. If the process is not set up early it becomes much more difficult to catch up; and reconstructing the project from daily logs, supervisor notes, and photographs, etc. may not provide the proper decision-making information. In many cases, keeping the data capture process simple, targeted, and easy-to-follow should be a good starting point.

Another challenge facing the industry is that different vendors (such as water drying/emergency response professionals), Certified Industrial Hygienists (CIHs), and carriers do not always speak the same language when it comes to pollution events. Moreover, pollution policies do not typically reference or are silent on the vendors' nomenclature, guidelines, and definitions that might describe levels of cleanup.

For instance, in the water drying/remediation cleanup business, professionals typically follow the Institute of Inspection Cleaning and Restoration Certification guidelines (IICRC-S500 series) that divides water damage cleanup and restoration into three categories: Category I targeting "clean" or fresh water releases that may become contaminated over time (i.e., a plumbing leak); Category 2, which targets more contaminated water; and Category 3, which is contaminated and could cause sickness or discomfort if consumed by humans with time and temperature variations (i.e., a sewage release, rising floodwaters, etc.). Likewise, CIHs may follow other protocols drawing from completely different recommendations, such as the Environmental Protection Agency, New York City Health Department, or other indoor air quality (IAQ) guidelines for mold remediation.

Challenges to Data Collection and Allocation [continued]

For carriers, some pollution policies contain microbial endorsements that give wide discretion to CIHs (in the absence of regulations) to recommend and design corrective actions and prepare written mold cleanup protocols for contractors to implement. While this may have good intentions, there have been many cases where the CIH retained by the insured does not have the proper experience or training to work on mold projects or may develop cost-prohibitive protocols that do not mesh with the intent of the policy. Because of these potential disconnects, it's important that all parties are upfront, transparent, and part of the process early on – to minimize confusion and overcome differences in languages and definitions.

HETI...Helping with Damage Assessment and Allocation

Pollution allocation can be challenging during time-critical cleanups and complex events with secondary pollution layering. Claim professionals must take a lead role in coordinating and tapping into qualified resources, such as HETI, to assist in capturing critical data so that informed decisions during coverage analysis and throughout the lifespan of the project can be made. In HETI's experience, establishing a game plan early on and creating simple processes for vendors to follow in data collection can save back-end time and frustration. If upfront agreements can be reached with all parties regarding sharing of costs, exposures can be minimized. However, several questions must be answered and specific data collected to establish a rationale for potential allocation of damages



Ultimately, the hidden truth in the industry is that pollution allocation is more an "art form" at times rather than pure science and few professionals are trained or understand the types of questions carriers are looking to solve. Insurance professionals should not assume all environmental consultants have the right experience in performing pollution allocations.

What's important in the end is that the "art form" is supported by data/science and the allocation is reasonable to all parties – providing a platform for negotiations to support the coverage position and a proper response to claimed costs.

For further information on this and other HETI claim support services, please contact us.

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