

A background image showing a close-up, vertical stack of numerous metal drums. The drums are painted in various colors, including bright blue, vibrant orange, and a single green drum. The perspective is from a low angle, looking up at the drums, which are stacked closely together. The lighting is bright, creating highlights and shadows on the metallic surfaces.

Disaster Response: Managing The Environmental Risks

By Frank Westfall and Robert Winterburn

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When an incident happens, it is important to be able to identify pollutants and other materials involved, protect employees, limit contamination, assess the extent of damages, initiate required reporting, and begin appropriate cleanup measures.

Whether it is a major storm that devastates an entire region, a release of hazardous materials, or a water pipe that bursts and floods a storage room, disasters both large and small can cause significant and costly damage. Commercial and public property owners and managers recognize these exposures, but may overlook the potential environmental repercussions that can occur when disasters lead to the release or spread of regulated materials such as asbestos, chemicals, heating oil, other pollutants, or contaminated water. The exposures may be compounded if the contamination spreads to neighboring properties. To help deal with these risks, property owners and property management firms should have a plan in place to quickly assess the incident in order to better protect their employees, control any contamination, report the incident to the proper authorities, and clean up the property in compliance with local, state, and federal regulations.

A timely and effective response is a key factor in helping to limit the damage and expense associated with these types of incidents, as well as the potentially significant loss of income from a lengthy shut down during remediation. Because such incidents are infrequent, many businesses and public entities may not have the in-house experience needed to deploy the correct resources, properly report the incident, or manage the cleanup and remediation. Organizations that wait until an incident occurs are likely to find that a delayed response is significantly more costly and may risk inadvertent regulatory violations and penalties.

Companies that create a plan of action are more likely to know what to do when a disaster strikes to help mitigate potential environmental exposures. The plan outlines what steps to take, which specialists to contact, and which

government agencies to notify. Even planning an adequate response to an environmental incident requires specialized knowledge. Because of the complexities involved, property managers may choose to work with risk engineers who specialize in environmental incident planning and response management. In addition, they may benefit from access to new Internet-based systems designed to provide immediate notification to the response management team to better minimize the potential for costly delays.

The Environmental Risks for Multi-site Property Owners and Managers

Disaster-related environmental exposures may potentially affect a broad range of commercial and light industrial businesses, commercial apartment owners, and public entities that own properties. Incidents related to wind, water, or fire losses can have an associated environmental impact that must be properly addressed.

A widespread disaster can have an enormous environmental influence on a region and on thousands of individual businesses. When Superstorm Sandy struck New Jersey and New York in October 2012, the high winds and a storm surge of more than 14 feet led to a variety of oil and fuel spills throughout the region. In some cases, the spills posed hazards to sensitive salt marshes, fish, and waterfowl.¹ Superstorm Sandy, which hit the New York area just under hurricane strength, was the third most costly U.S. storm after Hurricanes Katrina and Andrew, causing \$18.75 billion in insured property losses. The 193,000 commercial claims, including business interruption, due to Sandy totaled \$8.9 billion.²

Hurricanes and tornadoes can cause significant damage and spark concerns about the potential for pollutants or hazardous materials to be spread by wind and water, but smaller disasters can also have an impact. In the example of a burst water pipe in a basement storage area, the property owner would have to determine whether it involves potable water, grey water, or even sewage, and what impact that may have on employee health, the inventory within the storage space, and the building's operations.

Older buildings, in particular, may contain regulated materials such as asbestos or lead paint. Commercial apartment buildings in cities such as New York City and Boston may be heated with oil, and any spills resulting from oil tanks on premises can cause significant environmental problems and may trigger regulatory reporting requirements. Owners of strip malls who have housed dry cleaners should recognize the potential for contamination of soil and groundwater by regulated dry cleaning fluids. Public entities that own or control properties also face potential disaster exposures. For instance, contractors preparing publicly owned properties for redevelopment or sale may inadvertently cause damage that results in the release of regulated materials such as asbestos.

Any regulated or hazardous material can pose a significant environmental exposure risk to employees and third parties, as well as bodily injury, business interruption, and liabilities arising from damage to neighboring properties. Organizations also should be aware of the potential for extended property closures during cleanup and remediation that can lead to considerable loss of revenue.



The Challenges of Environmental Response

While commercial and public property owners and managers face a wide variety of environmental risks, they understand the value of engaging individuals who have specialized expertise dealing with emergencies requiring focused response, cleanup, and remediation. When an incident happens, it is important to be able to identify pollutants and other materials involved, protect employees, limit contamination, assess the extent of damages, initiate required reporting, and begin appropriate cleanup measures. Time is critical, as contamination may continue to spread, potentially increasing the damage as well as the liabilities and eventual cost of remediation. In many cases, the appropriate authorities must also be notified, and delays in reporting can lead to costly fines.

Whether an incident involves asbestos being released into the air, solvents or chemicals into the water, or the spread of other pollutants or regulated materials, property owners have to decide quickly on the best course of action. Various contractors may have different views on the best approach. Still, it will be

necessary to choose among those contractors to assess the extent and type of contamination and to handle the cleanup or remediation. Property owners may find it beneficial to engage an environmental consultant to conduct testing to determine the type and extent of the contamination and to make sure the pollution has not spread beyond the building or property line.

Depending on the situation, the response may be limited to a cleanup crew or require hazardous materials specialists. Property owners may find that the longer it takes to identify a capable contractor to address the contamination, the more costly remediation can be.

When choosing a contractor, it may be difficult to assess whether the response is the most appropriate and cost-effective solution. As a proactive measure, a vendor may decide to respond with more equipment and personnel than necessary, adding to the overall cost – and in the event of a widespread disaster, such as a hurricane, tornado, or earthquake, it is important to realize that unscrupulous contractors may seek to take advantage of property owners by doing so.

Organizations that delay seeking expertise until after an incident occurs can face a number of challenges. They must decide on the best course of action for what may be a highly specialized response, and they have to find contractors best-suited for the situation. While local authorities, such as fire departments, may be able to deal with emergencies, they may not be the most ideal source for cleanup and recovery services. No matter what measures are decided upon, without proper management and oversight of the response, the costs of action may escalate.

Meeting Regulatory Mandates for Environmental Incident Reporting

Any incident involving the release of hazardous or regulated materials must be reported to the relevant authorities in a timely manner. Depending on the jurisdiction, notification may be required in as little as an hour, or simply as soon as possible. Penalties for non-compliance can range up to \$50,000 per day, with each day considered a new violation in some cases. In recent years, the trend has been toward fines and penalties being assessed more frequently for failure to report. In more populated areas, there is a more stringent framework for fines and penalties.

Property owners need to know which agencies require reporting based upon the material released, quantity of the release, location of the release, and receptors impacted. Depending on the incident, it may be necessary to report to a variety of authorities from the county health department to state and federal environmental agencies. For instance, if an incident involves the release of Polychlorinated Biphenyls (PCBs) from a property into the water, it may be necessary to file a report with the local fire department, the state, and also

federal regulators under the Resource Conservation and Recovery Act (RCRA) of 1976.

Reporting thresholds may vary significantly from state to state. For example, a spill of a small quantity of diesel fuel that does not require reporting in one state may be reportable in another. The requirements may depend on whether the incident involves a potable water source, the quantity of materials involved, and the environmental receptors, such as fish and waterfowl that may be impacted by the release.

Regulators will want to know the extent of the contamination, the potential contamination of neighboring properties, the steps being taken to address the incident, and how it will be handled. Even if local authorities and regulators visit the scene, property owners still have a duty to report the incident. For instance, if a fire results in the release of hazardous materials and the fire department and environmental regulators respond, property owners still have an obligation to report the event to all relevant authorities.

Planning Improves the Response, Controls Expenses

To ensure a quicker, more effective response at an appropriate cost, businesses and public entities understand the need to plan ahead for an incident. It is recommended that every organization have a business continuity plan that outlines how operations will continue in the event of a pollution incident or disaster. The planning process itself is designed to enable property managers to identify and mitigate potential exposures and liabilities involving the site, to better safeguard and train employees, and to target any off-site exposures.

Key steps include creating an emergency response team, identifying the specific risks involved, and finding the response vendors best-suited for those exposures and contracting with them beforehand. The exposures and responses will depend on the type of property and its operations; for instance, whether it involves a light industrial business or commercial apartment building.

Assessing organizational risks includes careful accounting of materials stored and used in the normal course of business operations, as well as regulated materials used in the construction of buildings themselves. It is essential to consider how those materials may react should they be damaged by various elements, including fire, wind, or water, and the potential spread of hazardous materials beyond the property. Organizations will want to develop an appropriate course of action for each exposure identified.

For example, if the property contains an old warehouse built with asbestos-containing materials, the plan would establish how any asbestos contamination would be handled in the event that high winds or heavy snow damage the structure. In this case, a vendor that specializes in asbestos remediation would be needed. Incidents involving a heating or fuel oil spill or mold contamination would require a contractor with the skills, experience, and equipment to properly respond to the event.

A complete plan encompasses all of the applicable scenarios and responses. It details which regulators will need to be notified and how those reports will be made. It addresses in detail how the organization will return to normal business operations after the incident. Because conditions are always changing, a good plan is dynamic and adaptable, as well as reviewed and tested on a regular

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basis. Following an event, a crucial step is to review the causes of the incident and evaluate the response. This practice allows an organization to make necessary changes to the plan, lessen the chances for future incidents, and improve their response.

A robust and comprehensive plan is the key to ensuring that employees understand their responsibilities, the appropriate resources and experts are positioned to respond to environmental incidents, and to allow an organization to focus on resuming operations as quickly as possible.

Deploying a Timely, Cost-Effective Response

While planning is crucial, even well-prepared organizations can be seriously impacted by a storm or experience an accident that leads to environmental problems, such as a gasoline spill, mold, lead paint, asbestos, or other regulated materials.

Because of the complexities involved in planning for and responding to environmental incidents, companies and public entities may want to work with risk engineers who have experience in this area. By working with risk consultants ahead of time, organizations can develop a plan that will respond to their specific exposures at a particular property. This planning includes identifying the potential exposures that may arise from the materials and equipment on a specific site and from the building itself (e.g., asbestos siding or roofing or heating oil storage tanks), developing the appropriate response for each of those exposures, and lining up vendors best-suited to handle those exposures.

Organizations may also benefit from working with environmental risk consultants who have specialized expertise in assisting companies managing an environmental response project. In case of an incident, engineers can identify the materials involved, provide proper notification to authorities, and ensure the most appropriate, cost-effective resources are brought in to address the situation. Since time is such an important factor, property managers may want to consider an Internet-based system designed to provide a single tool for reporting, incident triage, response, and closure. Such a system can provide incident alert capabilities, technical response coordination, environmental testing, assessment services, and regulatory reporting information in one central response platform. This approach allows property managers to define the cost of the response up front through the selection of the most appropriate and cost-effective contractors for immediate and longer-term mitigation services.

When disaster strikes, property managers want to know which contractors have the right experience to respond properly to the incident, how to protect employees, prevent the spread of hazardous materials, manage the cleanup, and initiate the proper regulatory notifications. A proactive approach that includes planning in advance, experienced response management, and incident alert capabilities for rapid response provides an effective way to help limit damages, injuries, and expenses so that property managers can focus on getting their operations back up and running.

The ESIS Solution

ESIS Health, Safety and Environmental (HSE) specializes in solutions designed to provide a comprehensive response to environmental incidents. Our highly qualified consultants can assist companies in planning for events to help companies know what to do when and if disaster strikes. In addition, they are a ready resource on the ground when environmental incidents occur, able to apply their experience and expertise to each unique situation and circumstance. As a result, companies that work with ESIS HSE are better able to more quickly navigate a myriad of issues helping to minimize the negative impact to the business and the community at large.

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Endnotes:

1. Post Hurricane Sandy, NOAA Aids Hazardous Spill Cleanup in New Jersey and New York, Nov. 15, 2012. See: <http://response.restoration.noaa.gov/about/media/post-hurricane-sandy-noaa-aids-hazardous-spill-cleanup-new-jersey-and-new-york.html>
2. Sandy third costliest storm in U.S. history, Insurance Information Institute, press release. Oct. 22, 2014. See: <http://www.iii.org/press-release/media-advisory-on-the-two-year-anniversary-of-superstorm-sandy-come-to-the-iii-for-insurance-facts-resources-and-expert-analysis-of-the-storms-impact-102214>



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