



PRECAUTIONARY MEASURES

Identifying exposures is the first step to managing environmental risk.

Over the past 10 years, a growing number of construction firms have started to realize that environmental exposures exist in many typical construction activities, regardless of the type of work performed. Environmental exposures, when left unmanaged, can easily threaten the life of any

organization. While more contractors are acknowledging this reality, few are actually acting upon it while truly attempting to manage the risk.

With the development of environmental insurance over the past 10 years, many contractors have looked at environmental insurance as a method of managing

environmental risk, when in reality it should only be considered a financing or funding option in the event of a loss. In addition, only a few contractors have actually taken the time to methodically plan out their environmental risk management strategies, let alone successfully executing the tactics when adverse circumstances arise. For those that have not initiated the process, the first step in developing risk management strategies is identifying exposures.

ENVIRONMENTAL RISK PROFILES (ERPs)

Whether it's exacerbating existing petroleum hydrocarbon contamination in soil at a jobsite or applying too much of a curing compound that contains a volatile organic compound like xylene, environmental exposures can easily threaten the life of any organization. Using an environmental risk profile (ERP) is a simple way to identify environmental exposures, explore a firm's risk management options and adopt effective environmental risk management strategies.

An ERP can be defined in many ways. One definition is rather simple—an ERP is “a structured management tool for identifying the various environmental exposures associated with a contractor's operation and establishing techniques to manage, reduce or eliminate such exposure.” Like many risk profiles, it encompasses a review of the organization's operations with a focus on administrative strategies/protocol for reducing or managing particular risks. Based on an organization and its exposure to environmental liability, it can be as comprehensive as a textbook or as simple as a spreadsheet.

IDENTIFYING THE EXPOSURE

An essential step in the risk management process includes identifying risk. However, even before this occurs, it is wise for a firm to develop an objective that motivates the organization to incorporate environmental risk management into virtually every facet of its business operations. This will also help ensure the development of an effective ERP. Once the objective is established, an exposure analysis is conducted that identifies specific environmental risks. Four major areas of concern in construction operations are:

- Jobsite operations
- Owned or leased properties
- Transportation
- Disposal liability

Once complete, each category can then be broken down into specific risks that expose employees and/or expose the firm to environmental liability. For example, consider the following partial list of exposures related to a typical heavy highway or street/road contractor:

- Disturbing naturally occurring environmental hazards like asbestos mercury, lead, arsenic, silica, radon and so forth.
- Release of oils/fuels in tanks at a jobsite as a result

Korean Business District Named Green Pilot Project

The New Songdo City International Business District in South Korea being developed by New York's Gale International has been accepted as a pilot project by the U.S. Green Building Council for its LEED for Neighborhood Development pilot program, the first rating system for neighborhood design.

The LEED for Neighborhood Development rating system for green urbanism will be a tool to help planners and developers create communities that not only protect the environment, but also address important public health issues. Songdo International Business District will play a pioneering role in helping to set this standard for sustainable urban planning and smart growth based on criteria such as density, proximity to transit, environmental preservation, mixed housing type and pedestrian-friendly design.

Songdo International Business District (IBD) is unusual in that it is seeking LEED certification for an entire city. By its very design Songdo will be an environmental standout not only in Asia, where many urban areas are in a state of environmental crisis, but the world, according to a press release from the USGBC. Songdo is one of only three LEED for Neighborhood Developments projects in Asia (two much smaller projects are in China), and one of only five outside the United States and Canada. Indeed, Songdo IBD is by far the largest project outside North America to be included in the 18-month pilot program.

Gale International is an international real estate investment and development company with headquarters in New York and offices in Boston; Irvine, Calif.; Seoul and New Songdo City, South Korea. Gale began constructing the \$25 billion, 1,500-acre Songdo International Business District in 2004 in a 70/30 joint venture partnership with POSCO E&C. It is estimated that when completed in 2014, Songdo will be home to 65,000 people and that 300,000 people will work there. Songdo is located along the coast of Incheon, 35 miles southwest of Seoul, and will be linked directly to Incheon International Airport by a 7.4 mile highway bridge.

Songdo IBD's participation in the LEED for Neighborhood Developments pilot is being overseen by YRG Sustainability Consultants. Whitman Strategy Group, Gale International's primary environmental advisor, and Terrapin Bright Green are also key contributors to the initiative. In addition Gale International intends to work closely with the recently formed Korea Green Building Council.

Long-term sustainability and the minimization of the city's carbon footprint have been considered in every design and engineering decision by master-plan architect Kohn Pedersen Fox Associates PC, and chief engineers Arup and Cosentini Associates.

U.S. Green Building Council Hits Membership Milestone

The U.S. Green Building Council (USGBC) has welcomed its 10,000th member company.

"This achievement is a significant milestone in the growth and development of the green building movement because it demonstrates a broad conviction that our built environment can improve the health of our planet, our economy, and our communities," says Rick Fedrizzi, President, CEO and founding chair of the organization.

"At all levels, our members—their vision for a sustainable built environment, their knowledge of building science and practice, and their commitment to results—are why the green building movement has grown exponentially in the last decade and a half," he continues. "Thousands of volunteers have contributed tens of thousands of hours to the development of the LEED green building rating system; chapter leaders all over the country are making transformation happen at the local level; and all of our members are raising the bar for their colleagues throughout the industry."

Today, the green building industry is worth about \$12 billion, whereas a decade ago it was negligible, according to a press release from the USGBC. The USGBC was founded in 1993.

More information is available at www.usgbc.org.



owned or leased properties, transportation and disposal processes to comprehensively study the exposures the firm faces.

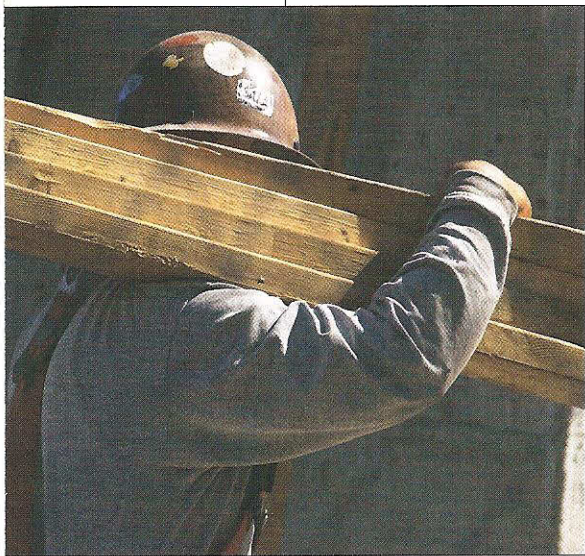
MANAGING THE RISK

When it comes to managing risk, education is a key factor. Do employees understand the exposures? Do they understand how they can be exposed to toxic substances or hazardous conditions? Do they understand what liability the company assumes when it exposes third parties to hazardous or toxic conditions?

Every field person can't be an environmental expert but they should be able to identify potential risks and understand the response techniques. As part of the ERP, they should also have responsibility at some level for ensuring education occurs within the workforce and management techniques are executed at the proper times.

At this point in the process an organization can complete the environmental risk profile by identifying various techniques available to them and their employees for managing environmental risk. Some may consist of the following:

- **Contract Language.** From owner disclosure statements that help contractors identify if any pre-existing environmental conditions exist to environmental indemnification clauses, the use of such clauses will help the contractor minimize their risk. Also, pre-existing contaminations clauses can be developed to transfer liability back to the owner if a contractor is tied into the exacerbation of pre-existing environmental conditions.
- **Soil or fill acceptance procedures.** From simple visual inspections and documentations of the soil entering and leaving the site to requesting sample analysis of the material, contractors can minimize their exposure to spreading contaminated soil onto a "clean" site. Also, asking to have the deliverer of the soil identify its origin is always an easy and cost effective way to identify potential problems.
- **Environmental data searches.** There is an abundance of information on the Internet that can help contractors identify environmental conditions. A five minute search may tell you that the next project you are bidding on was or is a Superfund site, or had leaking underground storage tanks. While it may not prevent anyone from bidding, knowing this changes the risk profile of the site and therefore changes how you will bid and work the project. That is prudent risk management.
- **Relationships.** Partner with or develop a relationship with an environmental firm, law firm, consulting firm or remediation firm. The education such can provide may be critical.



- **Administrative protocol.** This ties back into education and addresses response procedures in the event a crisis situation arises. Creation of mold prevention and response programs and environmental management programs are good examples. Each document will help the organization understand what should be the response should an environmental situation arise.

- **Subcontractor management.** What subcontractor requirements are in place? Is environmental insurance required of them? Is there a qualification

process? If they are hired to abate mold, who qualifies them? All these questions need to be answered and documented to allow the organization to understand how exposures from subcontractors are managed.

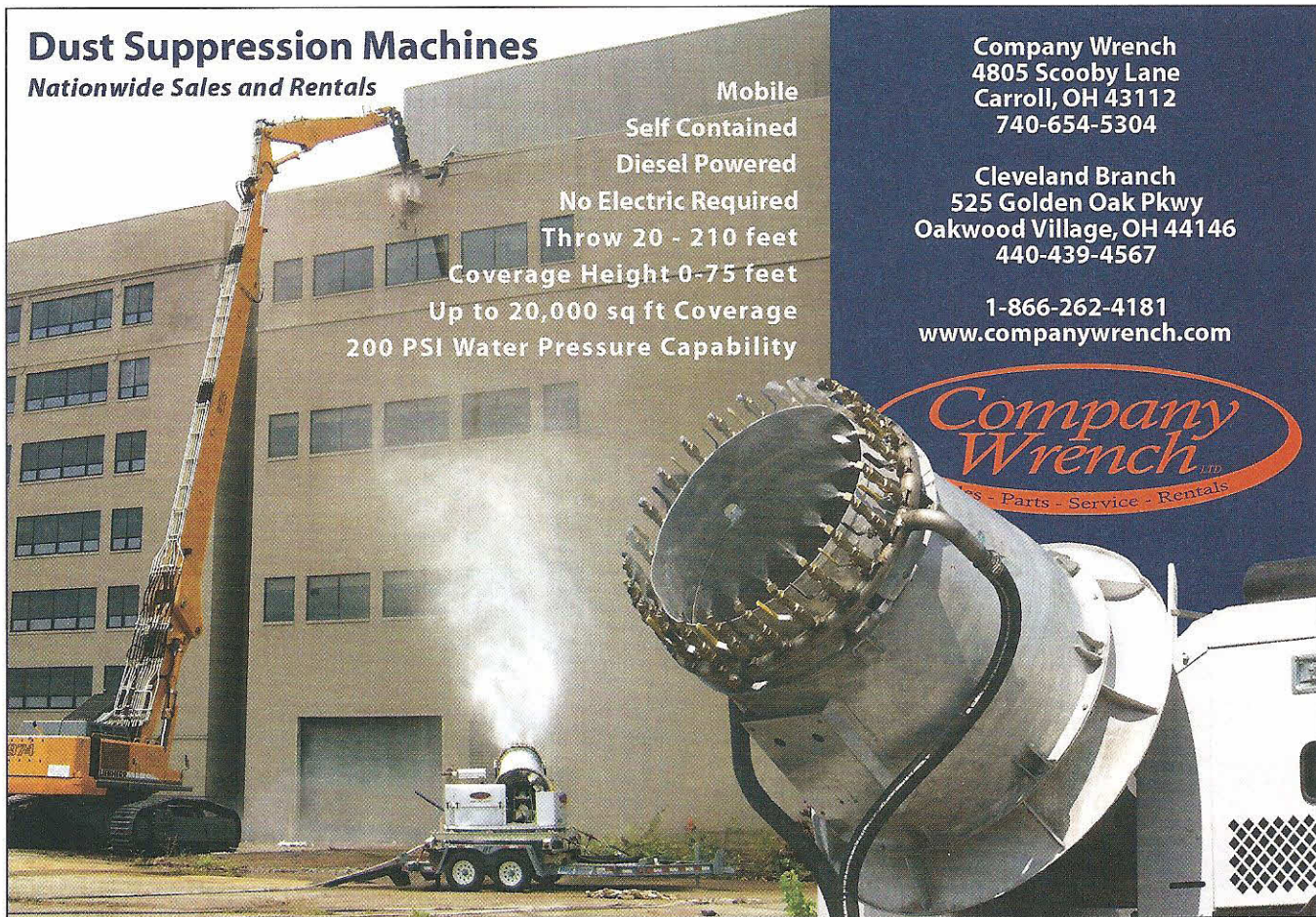
DECIDE, THEN ACT

There are many more risk management techniques that can be developed by each specific construction firm. Any single technique will never be the golden arrow that protects an organization from environmental risk; rather, it is a combination of all and more. However, planning and the proper execution of that plan when adverse situations arise can actually lead to continued profitability for the organization. **C&DR**

Jeff Slivka is senior vice president of New Day Underwriting Managers in Bordentown, N.J. New Day is a specialty intermediary for insurance agents and brokers with expertise in environmental insurance, environmental risk management and construction related professional liability. He can be reached at (609) 298-3516 ext. 102 or via e-mail at jeff.slivka@newdayunderwriting.com.

Dust Suppression Machines

Nationwide Sales and Rentals



Mobile
Self Contained
Diesel Powered
No Electric Required
Throw 20 - 210 feet
Coverage Height 0-75 feet
Up to 20,000 sq ft Coverage
200 PSI Water Pressure Capability

Company Wrench
4805 Scooby Lane
Carroll, OH 43112
740-654-5304

Cleveland Branch
525 Golden Oak Pkwy
Oakwood Village, OH 44146
440-439-4567

1-866-262-4181
www.companywrench.com

Company Wrench^{LLC}
Tools - Parts - Service - Rentals