



GLOBAL ENVIRONMENTAL REGULATION

Big Demands, Bigger Challenges

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Right now, there are more than 3,460 new environmental regulations awaiting attention from legislators and regulators around the globe.¹ Some touch on areas of environmental policy

in air, water and land use that are well established. Some break new ground and posit new powers for pollution prevention, control and remediation. And no matter where on the planet your company does business, they all have the power to profoundly alter how you do business.

In addition to new initiatives, increased attention is also being paid to measures already on the books. In the United States, the Environmental Protection Agency (EPA) has the largest budget in decades and an eye on stepping up enforcement. In Europe, the member nations of the European Union have

been working through the country-by-country implementation of the Environmental Liability Directive approved by the European Parliament. In Latin America, the growing middle class in Brazil and Chile is bringing greater pressure to improve the environmental quality of life. In Asia, especially China, there has been a drive to both update environmental legislation and more strictly enforce those rules already in place.

The time is now to get ahead of the regulatory curve.



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UNITED STATES: New Enforcement, New Standards

In the United States, “we have a government in Washington that is being more attentive to the environment and environmental matters,” says William Hazelton, executive vice president of ACE Environmental Risk. “A number of areas of environmental law have been revised and new laws are coming down the pike. The more aggressive the regulatory authorities are, the more CFOs will require risk managers to mitigate and transfer risks.”

The administration of President Barack Obama has brought increased attention to new environmental issues and enforcement of existing standards, both of which have the potential for insurance exposure.

In 2010, the administration raised funding for the U.S. Environmental Protection Agency to \$10.3 billion, the highest level of funding for the agency since its creation in 1970. Although subsequent budget cuts have lowered the EPA's budget to \$8.97 billion, it continues to have a considerable war chest for enforcement actions and the political will to carry them out.

The increased attention to enforcement is already clear. Every week brings a steady stream of announcements from the EPA's enforcement arm of lawsuits, indictments and fines levied over environmental violations. There is action along familiar fronts, like the June 2011 Superfund settlement that will cost an Idaho-based mining company \$263 million in remediation. The EPA said the company had released millions of tons of mining wastes into the South Fork of the Coeur d'Alene River and its tributaries, harming water, fish and birds in the area.

The EPA is also moving toward establishing a drinking water standard that would cover a group of volatile organic compounds that includes trichloroethylene and tetrachloroethylene, as well as eyeing regulations for hexavalent chromium.

Cleaning up water and air pollution has also become a rallying cry for the EPA and new regulations are moving forward on several fronts. In February 2011, the EPA announced that it would begin developing the first-ever national standard for perchlorate, even though the chemical, which is found in rocket fuel, fireworks, and bleach, has been on its radar screen since at least 1998.² The action, which expressly reversed a decision made by the previous American administration, came after perchlorate was found in more than 4% of public water systems in the United States. The EPA is also moving toward establishing a drinking water standard that would cover a group of volatile organic compounds that includes trichloroethylene and tetrachloroethylene, as well as eyeing regulations for hexavalent chromium.

In addition to water, there are also several industries that will be impacted by more stringent air emission regulations and additional reporting requirements. The EPA now requires mandatory reporting of regulated pollutants for companies in 41 industries ranging from auto makers and auto parts suppliers to semiconductors.

Penalties for not meeting the new reporting requirements are stiff. Following the guidelines for other violations of the Clean Air Act, penalties can be up to \$32,500 per violation per day and can include other criminal penalties depending on the severity of non-compliance. Fines can be levied for failing to collect data or report greenhouse emissions, as well as failing to follow the EPA's methodology for collecting data.

As the penalties grow, so too does the possibility that the costs for compliance will become too great for some industries to bear.

Experts expect increases in fines and penalties as more stringent regulations are developed. The public nature of the reporting could also open some companies, such as those in the coal-fired power industry to legal action from outside groups such as the Natural Resources Defense Council, which are looking to promote accountability for global warming.

As the penalties grow, so too does the possibility that the costs for compliance will become too great for some industries to bear. It is entirely possible that, particularly in the coal-fired power industry, plants will be shuttered. This could open the door to the sale of these sites and the discovery of unknown conditions and liabilities.

Beyond air emissions and compliance, the EPA has set priorities for making water supplies cleaner and safer. "It has added more sites to its Superfund program's National Priorities List in the last 18 months than at any time since 2000," says Hazelton.

The priorities, says Steven Piatkowski, vice president of engineering at ACE Environmental Risk, highlight areas that had never been regulated before by the EPA, such as storm water runoff that does not originate from point sources (such as pipes or man-made ditches). He explains that diffuse storm water sources, including agricultural sources and municipalities, are being regulated for storm water flow from fields and parking lots. "It is something that the EPA and states were looking to do in early days of the Clean Water Act, but never put regulation around it. Now they are," he says. As a result, "new industries that had limited or very little environmental exposure are now looking at potential liability," he says.

Further expanding potential exposure to a wider breadth of industries, the EPA is adding contaminants to the more than 90 now under its regulations. The action on contaminants bears special attention from risk managers because many non-traditional contaminants, including common pharmaceuticals, are likely to come under regulation and the potential for liability could be retroactive to the very start of production of these substances. The list of 30 contaminants now being considered for regulation under the federal Safe Water Drinking Act includes noroviruses and enteroviruses, as well as 28 chemicals, including testosterone, methyl chloride and methyl bromide. Public comment on the proposed contaminants was closed in May 2011 and the list should be finalized next year. The EPA will then begin two years of sampling.

Europe: 27 Countries, One Voice

It took Europe decades to come together on political and monetary policies. Environmental consensus moved at a much more rapid pace.

ELD: KEY POINTS

In 2004, the European Union's Parliament approved a far-reaching directive to address pollution and remediation on a pan-European scale. The Environmental Liability Directive was finally transposed into law in all 27 EU member nations last year. Here are some of its key points:

- **Polluter Pays:** The ELD holds those who cause environmental damage financially liable for cleaning it up, both the immediate problem and any ancillary damage it causes.
- **Coverage:** Damage to land, air and water from industrial or agricultural operations. The ELD wraps in previous directives on protection of water quality and wildlife.
- **Biodiversity and GMO Damage:** The ELD specifies liability for biodiversity damage, which is new in Europe. It also covers damage to protected species, natural habitats, water and soil caused by genetically modified organisms.
- **Non-Point Source Exemption:** The ELD does not cover pollution caused by society in general—so-called non-point source pollution or diffuse pollution. The ELD also does not cover pollution by nitrates, which are already covered by the EU's Air Quality and the Nitrates Directives.
- **Reasonable Defenses:** The ELD specifies no liability for environmental damage caused by force majeure (superior force, such as a natural catastrophe or other act of God).
- **Limited Role For NGOs:** Public interest groups can compel authorities to act on environmental damage and challenge their decisions in court, but non-governmental organizations may not directly sue polluters under the ELD
- **No Compensation For The Public:** The ELD does not mandate compensation to the public in cases of environmental harm.

In 2004, the European Parliament and the Council of Ministers approved the Environmental Liability Directive (ELD), making it squarely the polluter's duty to pay when the environment is harmed. The member countries were given three years to write its rules into their national laws and it became effective on April 30, 2007 even though not all countries had completed their work: Six years went by before the directive was written into law in all 27 member countries of the European Union. There are still wrinkles to be ironed out and there is significant discretion left to member states in interpretation and implementation, but its impact is already being felt. Some 50 cases have been brought so far under the principles of the ELD.³

Many of the terms of the ELD will be familiar to risk managers experienced in environmental legislation in the United States. Like U.S. law, it relies on precaution and prevention, and on making polluters financially liable for their actions. But it covers the environment on a much wider scale, geographically and conceptually. Pollution may not necessarily be the work of something that might traditionally be thought of as a pollutant. A fire that releases noxious vapors may subject regulated entities to liability.

The ELD directs member states to explore all the potential consequences of an environmental event, from land and air, to water and living organisms. It can compel polluters to remediate not only the initial damage that their action caused to one ecosystem, but also damage across all potentially affected habitats and species. It also demands that soil be decontaminated until it "no longer poses any significant risk to human health."⁴

Karl Russek, senior vice president of environmental risk for ACE International, further explains that key points of the ELD include the introduction of a new concept—biodiversity damages, essentially damage to protected species and natural habitats. "In practical application, this is similar to the concept of natural resource damages in the U.S.," he says. (See related sidebar, ELD: Key Points, for more details.)

"The liabilities of the ELD don't stop at primary remediation," he adds. In addition to primary activities to return damaged resources to a baseline condition, "there are also concepts of compensatory and complementary remediation," Russek says. "You might be required to clean up beyond the damage you caused," he says. Briefly, complementary remediation refers

CONTRACTORS BEWARE

The principle of “polluter pays” is well established in U.S. and international law. But the polluter may no longer be a smokestack industry. Contractors and consultants are increasingly at risk, whether they are involved in new construction, remodeling or remediation.

Both public and private projects often now require environmental insurance coverage.

Pollution can be created by the work itself: An improperly structured silt barrier that allows contaminated run-off from a new construction project to flow into a stream. It can also occur during the course of a remediation effort if a contractor lacks sufficient expertise to do the work properly. And don’t assume that because a particular kind of project did not require environmental insurance in the past, it does not need it now. Regulations and requirements have changed.

So, too, however have coverage options. New policies can provide protection for both third-party actions and first-party exposures, even when your company is working in conjunction with other contractors, subcontractors, and consultants.

to activities like acquiring new land or providing an alternative habitat when a badly damaged environment cannot be fully restored.

Russek also notes that while certain types of high-risk businesses are subject to a strict liability standard under the ELD (basically, heavy industrial businesses that require emissions permits), others are still held accountable with a negligence standard. (See related sidebar, “Contractors Beware.”)

“We’ve got large global consumer companies looking at placements because they’re worried about not only the liabilities, but the brand impacts,” Russek reveals.

Russek notes that the ELD comes on top of national laws within EU member states, some of which already were quite stringent. A risk manager who has had to address operations in France and Germany may already be well prepared for application of the ELD.

Russek draws a distinction between the implementation of the ELD and the question of compulsory insurance, which he says is moving much more slowly. The potential for exposure is already driving demand, even in the absence of a compulsory requirement to secure insurance. Forward thinking risk managers are addressing the issue

now instead of waiting for the legislation. The liabilities are there now and they need to be addressed.” Russek advises having risks addressed at least back to the date of the promulgation of the directive, which is 2007.

And the ELD is not the only European environmental legislation that should be on risk managers’ radar screens. The European Commission’s attempt to address climate change through its Emissions Trading Scheme is causing consternation now among non-European airlines.⁵ But it has the potential to establish a precedent that could affect other industries with high CO2 emissions.

Beyond liability, the EU is taking a stiffer stance on waste treatment, both general and electronic. In September, The European Commission put Belgium and Romania on notice that they had two months to turn the EU Waste framework into national law, as task that was to have been completed in 2010. The two cases are part of more than a dozen actions being taken against member states under the Waste Framework Directive.⁶

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There are also changes on the horizon to the treatment of electronic waste in Europe. The EU has had legislation restricting the use of hazardous substances in electrical and electronic equipment since 2003. But in 2008, it began a broad examination of those rules because of the rapid rise of ewaste and the pollution and health problems it can pose. The European Commission is seeking to set mandatory collection targets based on the weight of the devices and create a standard for electronic medical devices as well.⁷ In January 2012, the EU will hold a plenary vote on the Waste Electrical and Electronic Directive, which will obligate companies in those industries to collect and recycle waste, and make it more difficult to ship e-waste out of the EU to less stringent jurisdictions.⁸

Global Winds of Change

Like the weather, increased environmental regulation and enforcement is making its way around the globe. The global shipping industry—and its insurers—will be watching the repercussion of the grounding of the cargo ship MV Rena off New Zealand’s coast in early October. The grounding, which is being billed as the worst environmental disaster in New Zealand’s history, has released both fuel oil and ferrosilicon, a substance that could create a hazard to ocean life. New Zealand has arrested both the ship’s captain and second officer and officials are saying that the damage may exceed the maximum of the shipowner’s insurance.⁹

But accidents aren’t the only thing forcing change. Many countries—Chile and China among them—are finding themselves driven to new policies by a rising middle class, which is looking for an improved quality of life.

Consider Chile. A recent poll found that 69% of those surveyed would put sustainability ahead of job creation, up from 50% just two years earlier.¹⁰ And although the government

of President Sebastian Pinera was able to push through the approval of a hydroelectric dam project in an environmentally sensitive area of Chile’s Patagonia region in May 2011, it had to surmount widespread public disapproval of the project, including street protests in Santiago and other cities.¹¹

The climate is changing in China too, where a non-governmental organization has been pressuring Apple to address pollution caused by its lengthy supply chain. The Institute for Public and Environmental Affairs (IPEA), working in concert with the New York-based Natural Resources Defense Council, has gotten the American technology company to agree to a

DON’T BUY INTO A HEADACHE

The global recession has given some well positioned companies a potentially golden opportunity to expand through acquisitions. Although acquiring risk managers have become well acquainted with traditional pollution successor liability scenarios, environmental regulatory expansion that focuses on new contaminants poses greatly expanded liabilities that originate decades before the merger was ever contemplated. While the target company’s insurance may cease to provide coverage, properly structured insurance programs for the acquiring entity can mitigate its exposure.

THE REWARDS AND RISKS OF GREEN BUILDING

In both the United States and Europe, construction is increasingly green. Construction methods must be non-polluting and sustainable, and the finished structure must make efficient use of energy and water. That is particularly true in the U.S. as a result of the federal law known as the American Recovery and Reinvestment Act (ARRA). The stimulus effort favors projects with a high emphasis on sustainability. The technical expertise required to execute these projects places a large burden on risk managers to properly manage complex exposures that can span multiple lines of insurance.

And in embracing sustainability, there is always the risk of inadvertently stumbling into liability. Many green-building projects are specifying green roofs, which place plants on a roof-top grid to minimize storm water runoff and contaminants, as well as reduce the heating and cooling load on a building. But without proper drainage, as well as storage and aeration systems, water and chemicals can seep from the roof structure into the building, and cause mold, bacteria and indoor air quality and employee health problems.

meeting on supplier pollution and to promise to use an IPEA-compiled database to investigate contractors—both first-tier suppliers and their subcontractors. In a country dominated by contract manufacturing, the action could have wide implications for companies far beyond the tech space and their risk managers. According to news reports, General Electric and Nike are already working closely with IPEA to verify the environmental performance of their suppliers. It is not just manufacturers that are coming under fire. In Hong Kong, where air quality is increasingly problematic, residents have asked the local government to make air pollution prevention a priority.¹²

And broader research does not support claims that environmental concerns are dampening growth in the Asia-Pacific region: Studies in India, for example, see development moving ahead at a rapid pace, even project that involve substantial deforestation.¹³

But even as China and Chile advance, the policy outlook remains cloudy in one of the world's most environmentally sensitive regions: Brazil. While the country was an early adopter of environmental protection laws, enforcement has been lax or non-existent. The Brazilian Ministry of Science and Technology recently reported that deforestation in the Amazon increased 127% from 2000 to 2010, even though the government placed more than 135,000 square miles of land under protection.¹⁴

Rising deforestation—often for cattle ranching—has made Brazil the world's fourth largest emitter of greenhouse gases. Though the country pledged to the United Nations' 2009 climate change conference that it would slash those emissions by 40% by 2020, it has also vowed to double the size of its cattle herd by 2018¹⁵. In May 2011, Brazil's parliament weakened its long-standing Forest Code with changes to benefit ranchers.¹⁶

But if a rising middle class is a harbinger of changing attitudes toward the environment, then there are signs that the government in Brazil may need to pay more heed to legislation and enforcement. Between 2003 and 2010, the middle class in Brazil rose from 64.1 million people to almost 91 million, which now puts this demographic at 49.22% of the population¹⁷. The country has set an ambitious plan to meet the energy demands of its middle class with a massive investment in alternative fuels.¹⁸

The Role of Insurance

In 2004, the European Parliament and the Council of Ministers approved the Environmental Liability Directive (ELD), making it squarely the polluter's duty to pay when the environment is harmed.

As environmental regulations change and liability crosses more national boundaries, risk managers are seeking new solutions to protect their companies. "They are not just buying a U.S. master [policies] anymore," notes Hazelton. "More local contracts are being purchased."

But policies alone won't do it, he cautions. "It's not just the placement of the insurance, it's the servicing," he adds. "You need local claims and loss control specialists and that can be challenging in some countries. Servicing varying client needs in multiple countries and languages is a daunting task."

"We have a myriad of resources that are helpful to our clients when meeting these challenges," Hazelton says. "We come to work every day and continually look for ways to better service our clients."

Glossary

American Clean Energy and Security Act (ACESA): The Act proposed the use of a cap-and-trade system similar to the European Union Emission Trading Scheme to cut greenhouse gas emissions in the United States. It was passed by the U.S. House of Representatives in 2009, but the measure died in the U.S. Senate.¹⁹

American Recovery and Reinvestment Act (ARRA). A economic stimulus law approved by the U.S. Congress in 2009. It emphasizes job creation through construction, energy and environmental projects that strictly adhere to environmental laws and promote sustainability.²⁰

SOURCE: <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/157&format=HTML&aged=1&language=EN&guiLanguage=en>

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Environmental Liability Directive (ELD): Formally known as Directive 2004/35/EC of the European Parliament, it set sweeping new rules for environmental liability in the European Union. The ELD, which has been written into law in all EU member nations, establishes a “polluter pays” principle when environmental damage occurs.

National Priorities List: In the United States, a list of hazardous waste sites that might be eligible for cleanup under the Superfund program.

Natural Resources Defense Council (NRDC): A U.S.-based environmental action organization. It is working to curb global warming, reduce pollution by toxic chemicals, and assure safe drinking water supplies, among other goals.

Safe Drinking Water Act (SDWA): In the United States, a federal law that enables the Environmental Protection Agency to set standards for drinking water quality and protect the many sources of that water. Enacted in 1974, it was amended in 1986 and again in 1996. New proposed amendments would expand the contaminants regulated by the Act.²¹

Superfund: The environmental cleanup program established in 1980 to identify toxic waste sites across the United States and enforce their clean up. The U.S. Environmental Protection Agency has been adding sites to its National Priorities List and expanding the issues that need to be remediated at existing sites.²²

U.S. Green Building Council: (USGBC): An independent, Washington, D.C.-based non-profit that has established standards for energy-saving construction at the commercial and residential level.