ENVIRONMENTAL RISKS AT PORTS AND TERMINALS GROW AS OIL TRAFFIC DRIVES ACTIVITY

DECEMBER 2014
A sunken anchor. A stuck valve. A buried tank. These and other seemingly small problems at a port or terminal can lead to an environmental event costing millions of dollars to repair and taking years to resolve. And the risk of such events occurring has increased with the rapid rise in US oil production (see **FIGURE 1**) that has brought the transportation and storage of oil products to near-record levels.

This growing use of marine terminals and shore-side facilities by the energy sector creates significant revenue opportunities for ports and terminal operators, but also carries greater environmental risk, including uncovering previously unknown contaminants during expansion and violating complex environmental regulations. An understanding of environmental risks combined with thoughtful coordination of marine and environmental insurance solutions can help risk managers protect their organizations’ bottom lines.

**FIGURE 1**  US Crude Oil Production – Millions of Barrels per Day
*Source: US Energy Information Administration*
ENVIRONMENTAL RISKS AT PORTS AND TERMINALS

Environmental liabilities related to oil, chemical, and other releases during operations; onsite construction; legacy claims; regulatory fines; and other hazards can cost ports and terminal operators thousands or even millions of dollars.

OPERATIONAL RISKS

Environmental releases at ports and terminals can develop from a range of daily operations involving vessel berthing, containerized cargo, and liquid and dry bulk cargo. Any release has the potential to hurt the bottom line of ports and terminal operators through cleanup and disposal costs, regulatory fines and compliance requirements, and lost revenue. Further, the consequent legal and insurance issues may take years to resolve. For example:

► Litigation against a terminal operator continues, more than ten years after an incident involving a tanker that leaked crude oil into the Delaware River while approaching a New Jersey port. The cause of the release — an estimated total of 263,000 gallons — was found to be an abandoned anchor that the tanker struck en route to the port. This raised questions of whether the terminal’s berth allowed for safe ingress and egress. The open litigation involves determining the terminal operator’s potential liability and exposure to the vessel owner’s gross recovery claim of $180 million.

► In September 2014, a fire that ignited chemically treated wood caused the closure of container terminals for a weekday shift at a major West Coast port complex. The fire, which took more than 24 hours to extinguish, released smoke and toxic gases — including benzene and naphthalene — into residential and other areas surrounding the port. Cleanup and repair of damage to a wharf and warehouse, along with a structural review of the damaged areas, was expected to continue for several weeks. Local regulators continue to assess the potential impact of the fire on air quality at the port complex and its neighboring communities.

► A liquid chemical terminal operator reached an agreement with the Environmental Protection Agency (EPA) six years after an incident involving a failed tank that was adjacent to the Elizabeth River in Chesapeake, Virginia. At least 200,000 gallons of liquid fertilizer were not recovered after the spill; some of fertilizer entered the river. In August 2014, the terminal operator entered into an agreement under which it would reimburse the EPA $186,000 for past response costs incurred by the agency due to the incident.

Beyond oil and chemical spills, ports and terminal operators could have environmental spills as a result of:

► Construction activity: Ports and terminals are frequently situated on reclaimed, low-lying land, with imported fill, which sometimes contains contaminated materials.

► Storage facilities: Liquid bulk tanks with connecting pipelines could be subject to sudden and accidental structure failure, or gradual ground seepage and leakage.

► Ancillary operations: Tank cleaning, ballast water treatment, shipbuilding, ship repairing or demolition, metal finishing and plating, fire protection activities, paint shops, foundries, and manufactured gas works all present environmental exposures.

The variety of potential contaminants that could be released through operations includes metals, fuel and oil waste, low-level radioactive material, dispersing agents, polychlorinated biphenyl (PCBs), asbestos, and other agents now considered “bad actors.” Remediation projects involving contaminants can be complex and costly.
HISTORICAL AND LEGACY RISKS

Ports or terminal operators may also face legacy issues from past operations, including those conducted by tenants or unrelated businesses that previously operated on the site. Such exposures could extend decades into the past and, in the case of undiscovered or gradual seepage, lead present claims that may not have been filed at the time of the original incident. And past tenants or unrelated businesses may no longer be viable entities — which could increase the exposures to existing ports and terminal operators. Examples of legacy claims include:

► Waste disposal activity as required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as “Superfund.”

► Toxic tort occupational disease arising from exposure to environmental pollutants.

► Unknown environmental issues associated with past mergers and acquisitions or expansion projects.

Some government-owned ports may benefit from statutory limitations of liability or governmental immunity, which could reduce the potential impact of legacy claims. But such limitations may not be enforceable for pollution events that fall under either federal or state jurisdictions, and may not apply to private operations at a port.

REGULATORY SCRUTINY

Environmental losses or claims can be complex, potentially involving a variety of regulations from federal and state environmental agencies. In addition to Superfund requirements, port and terminal operators must contend with:

► Proposed revisions by the EPA to the definition of “navigable waters.” The proposed definition could expose operations once thought to be excluded from water pollution risks to liability under the Clean Water Act and similar laws.

► Natural resource damage assessments (NRDAs), which can extend pollution liability well beyond cleanup, containment, removal, and disposal.

There has been a proliferation of NRDA prosecutions at both the federal and state level, helping to fund not only a number of restoration projects, but also the regulators themselves. Elements of an NRDA could include payment of defense costs and environmental testing — for example, to ensure that contaminants have not reached aquifers used by the local population; compensation of affected residents; contributions to community organizations; and establishment of a general claim fund.

If assessed, an NRDA can create a long-tail financial responsibility for a company that is deemed the “responsible party,” extending several years after cleanup is completed and resulting in fines, penalties, and other expenses in the tens of millions of dollars. For example, the rupture of a pipeline at an oil refinery operating at a major New Jersey port resulted in the release of almost 600,000 gallons of fuel oil into neighboring wetlands. The event resulted in an NRDA of $11.5 million to restore the damaged wetlands.

When pursuing companies for violating environmental regulations, government agencies and prosecutors typically interpret legislation to cast the broadest net possible, seeking financially viable targets to effect restitution. In situations that are often high-profile and politically charged, regulators and prosecutors often rely on the concept of joint and several pollution liability under CERCLA and other regulations as they pursue targets with “deep pockets.”
Sample Environmental Risks for Ports and Terminal Operators

1. Reclaimed land.
2. Hazardous containerized goods.
3. Sunken anchors and other barriers to ingress and egress of ships.
4. Vessel unloading of chemical and other substances.
6. Pipelines (buried and above ground).
7. Neighboring businesses.
8. Bulk and dry products.
9. Rail and vehicle pollution.
10. Natural resource wildlife damage.
11. Construction.
Ports and terminal operators can transfer many of their environmental risks to commercial insurance markets. It is important to understand how various coverages interact, particularly marine and environmental insurance products.

MARINE INSURANCE SOLUTIONS

Marine insurers have historically recognized the pollution exposures inherent in shore-side operations, and have incorporated pollution coverage into their industry forms without the need for substantial additional underwriting, environmental surveys, or premiums.

Sudden and accidental (S&A) time-element pollution liability coverage is found in a variety of marine liability insurance products typically purchased by ports and terminal operators. These include:

- Marine general liability.
- Marine terminal operator’s liability.
- Wharfinger’s liability.
- Stevedore’s liability.
- Ship repairer’s liability.
- Vessel pollution liability.
- Shipyard pollution liability.
- Cargo owner’s pollution and legal liability.

As compared to commercial general liability products available in the casualty insurance marketplace — based on Insurance Services Office (ISO) policy forms — marine insurers tend not to be as rigidly devoted to specific insurance language. Marine insurers are often receptive to broader, manuscript S&A wording presented by insureds and their brokers, allowing for coverage beyond a limited set of named perils. Significant S&A capacity exists in the US and Europe, with a diverse set of primary and excess insurers willing to compete for US port and terminal risks. Marine insurance mutuals can also provide package products, including S&A coverage along with liability, property and business interruption, handling equipment coverage, and limited coverage for fines and penalties.

Working with their insurance advisors, ports and terminal operators can gain an understanding of how marine and environmental insurance products are interrelated, and design and implement the right solutions to meet their needs.
Although marine liability products can provide robust coverage for many pollution exposures, a number of typical pollution conditions and exclusions may result in uncovered exposures and ambiguities. For example:

- Marine policies provide S&A “time-element” pollution; events covered by these policies are required to be known within a certain period of time after commencement and to be reported to insurers within a certain period of time after becoming known to the insured. Although the specific time periods typically can be negotiated, there will always be limitations; time-element coverage is not likely to cover gradual seepage of pollutants or pre-existing conditions outside of the limited time reporting and discovery parameters.

- Marine pollution liability policies typically exclude coverage for fines, penalties, and exemplary, treble, and punitive damages; first-party pollution cleanup, containment, and removal; sites or locations used in whole or in part for the handling, processing, treatment, storage, disposal, or dumping of any waste materials or waste substances produced from insured operations; subsidence losses caused by subsurface operations; and losses caused by the insured’s intentional or willful or deliberate violation of or non-compliance with any statute, rule, or regulation.

- Marine market placements typically do not provide an affirmative statement of pollution liability coverage beyond the context of third-party bodily injury and third-party property damage. Manuscript coverage forms may afford affirmative coverage for third-party pollution liability cleanup, containment, and removal, but affirmative liability coverage for environmental damage and remediation is uncommon, often leading to ambiguity in claims. Coverage issues concerning NRDAs can be particularly burdensome, considering the lengthy period associated with administering this type of claim (often 5 to 10 years).

ENVIRONMENTAL INSURANCE SOLUTIONS

Environmental insurance solutions are purpose-built products, specifically engineered to provide pollution liability coverage with the intent to fill the coverage gaps not insured by traditional marine and casualty markets. For ports and terminal operators, the two most pertinent forms of environmental insurance are pollution legal liability and contractors pollution liability.

POLLUTION LEGAL LIABILITY (PLL) INSURANCE

Sometimes referred to as environmental impairment liability (EIL), PLL provides pollution coverage for the historic and current operations of an insured property. Available for a single site or multiple sites, a PLL policy is typically designed to cover pollution liabilities arising from any or all of the following:

- Cleanup and remediation.
- Third-party bodily injury and property damage.
- Defense costs.
- Transportation upset/overturn.
- Non-owned disposal sites (NODS).
- Civil fines and penalties and natural resource damage.
- Business interruption, extra expense, and diminution in value.
PLL policies generally provide ports and terminal operators with the broadest environmental coverage available because they do not include typical policy restrictions found in marine or casualty forms. For example, there are no time-element restrictions for discovery and reporting of a pollution condition. Coverage under a PLL policy also is not tied to an event’s timing, the insured’s knowledge of an event, or how quickly an event is reported to insurers. This means that PLL insurance can respond to either preexisting conditions — for example, previously undiscovered or unknown conditions that currently exist — or new conditions.

PLL policies can also be written to include coverage for:

- Civil fines and punitive and civil penalties where allowed by law, including mass tort claims and EPA civil fines and penalties or cleanup contributions on Superfund sites.
- Natural resource damage.
- On-site or first-party cleanup.
- Both S&A and non-sudden (gradual) pollution.

Given the specialist nature of the product and the underwriting process, it is possible to tailor these programs to meet the varying needs of ports and terminal operators. In addition to offering specialized coverage forms, PLL markets have the capability to provide valuable claims and loss control services specifically focused on defending, mitigating, and/or avoiding pollution liability.

When accessing PLL coverage, careful consideration should be given to program structure. Given the broad pollution coverage provided, retentions will typically be higher when compared to marine policies. PLL policies are written on a claims-made basis, unlike most marine insurance policies.

**CONTRACTOR’S POLLUTION LIABILITY (CPL) INSURANCE**

Designed to protect against pollution liabilities associated with contracting operations performed by the insured, CPL insurance can respond both when a contractor causes contamination as a result of its operations and when a contractor’s operations exacerbate preexisting contamination. CPL coverage is typically occurrence-based, and can be designed to protect contractors on a practice basis through a master policy for all contractor activities performed over the policy term or on a project-specific basis. Project-specific policies can be provided either through owner controlled insurance programs (OCIPs) or contractor controlled insurance programs (CCIPs), providing dedicated limits to a project and covering all contractors at all tiers. Practice policy terms are typically annual, while project policy terms typically match the project duration and include completed operation/extended reporting period extensions.

**BUILDING AN EFFECTIVE INSURANCE PROGRAM**

Both marine and environmental insurance policies afford pollution coverage to insureds, but simply placing these policies on disparate terms can lead to unanticipated, negative results — especially in the event of a claim that is founded upon allegations of both sudden and gradual pollution. Instead, insureds should carefully coordinate placement of their marine and environmental insurance policies, ensuring that coverage gaps are properly filled and that their interests are aligned with those of their insurers.

Program design options available to insureds include the following (see FIGURE 2):

- **Option 1**: Schedule the environmental insurance as a primary policy, with marine insurance policies (primary marine and bumbershoot) being excess of the S&A elements of the environmental insurance.
FIGURE 2  Marine and Environmental Insurance Program Options

**Option 1: Environmental Primary**

- Bumbershoot Providing Excess S&A Pollution
- Marine Primary Liabilities, Including Excess S&A Pollution
- Environmental, Including S&A Pollution and Gradual Pollution

**Option 2: Environmental Primary, Marine Excluded**

- Bumbershoot Providing Excess S&A Pollution Element of Environmental
- Marine Primary Liabilities, Excluding S&A Pollution
- Environmental, Including S&A Pollution and Gradual Pollution

**Option 3: Marine Primary**

- Bumbershoot Providing Excess S&A Pollution
- Environmental, Including Excess S&A Pollution and Gradual Pollution
- Marine Primary Liabilities, Including S&A Pollution

**Option 4: Independent Placements**

- Bumbershoot Providing Excess Marine S&A Pollution
- Environmental, Including S&A Pollution
- Marine Primary Liabilities, Including S&A Pollution and Gradual Pollution
Option 2: Purchase a marine primary liability policy that excludes pollution completely, and allow the environmental policy to cover both S&A and gradual events. A marine umbrella, or bumbershoot, would then sit excess the primary marine liabilities for non-pollution events and excess the environmental policy for S&A events, subject to the bumbershoot’s S&A marine policy conditions.

Option 3: Design a marine program to include S&A pollution and to be primary to the environmental policy with respect to S&A pollution. The environmental policy would provide excess S&A pollution and difference-in-conditions (DICs) to include gradual pollution coverage. The marine bumbershoot policy would sit directly excess of the marine primary coverage for all events, except pollution. The bumbershoot would also sit excess of the environmental policy with respect to S&A pollution but per marine S&A policy terms.

Option 4: Purchase independent and separate towers for marine and environmental.

In building the right insurance program structure, insureds and their advisors should carefully review “other insurance” provisions, indemnity triggers, policy exclusions, and policy conditions. First-party property policy cleanup provisions should also be considered, along with any products and completed operations pollution that may be included in an insured’s casualty program. Insureds and their advisors will also need to address aggregation and drop-down provisions in all policies.

Careful tailoring and agreement on policy language with insurers is critical.

MANAGING PORT AND TERMINAL OPERATORS’ ENVIRONMENTAL RISKS

Increasing production of oil in the US is likely to put added strain on oil storage and transportation systems, including ports and terminals, while environmental regulation of navigable waters continues to evolve. From vessel berthing and cargo management to construction and mergers and acquisitions, ports and terminal operators must understand the potentially greater environmental risks they face as a result of current and historic operations and regulatory scrutiny.

Marine and environmental insurance policies can help to mitigate many of these risks. Working with their insurance advisors, ports and terminal operators can gain an understanding of how these insurance products are interrelated, and design and implement the right solutions to meet their needs. Ultimately, this can help ports and terminal operators to better safeguard their operations and protect their bottom lines.
ABOUT MARSH

Marsh is a global leader in insurance broking and risk management. Marsh helps clients succeed by defining, designing, and delivering innovative industry-specific solutions that help them effectively manage risk. Marsh’s approximately 26,000 colleagues work together to serve clients in more than 130 countries. Marsh is a wholly owned subsidiary of Marsh & McLennan Companies (NYSE: MMC).

FOR MORE INFORMATION, CONTACT:

THOMAS J. PTACEK
Marsh Global Marine Practice
+1 312 627 6145
thomas.j.ptacek@marsh.com

CHRIS SMY
Marsh Environmental Practice Leader
+1 404 995 2748
chris.smy@marsh.com
MARSH IS ONE OF THE MARSH & McLennan COMPANIES, TOGETHER WITH 
GUY CARPENTER, MERCER, AND OLIVER WYMAN.

This document and any recommendations, analysis, or advice provided by Marsh (collectively, the 
"Marsh Analysis" are not intended to be taken as advice regarding any individual situation and should 
not be relied upon as such. The information contained herein is based on sources we believe reliable, 
but we make no representation or warranty as to its accuracy. Marsh shall have no obligation to update 
the Marsh Analysis and shall have no liability to you or any other party arising out of this publication or 
any matter contained herein. Any statements concerning actuarial, tax, accounting, or legal matters 
are based solely on our experience as insurance brokers and risk consultants and are not to be relied 
upon as actuarial, tax, accounting, or legal advice, for which you should consult your own professional 
advisors. Any modeling, analytics, or projections are subject to inherent uncertainty, and the Marsh 
Analysis could be materially affected if any underlying assumptions, conditions, information, or 
factors are inaccurate or incomplete or should change. Marsh makes no representation or warranty 
concerning the application of policy wording or the financial condition or solvency of insurers or 
reinsurers. Marsh makes no assurances regarding the availability, cost, or terms of insurance coverage. 
Although Marsh may provide advice and recommendations, all decisions regarding the amount, type 
or terms of coverage are the ultimate responsibility of the insurance purchaser, who must decide on the 
specific coverage that is appropriate to its particular circumstances and financial position.

Copyright © 2014 Marsh LLC. All rights reserved. MA14-13147 7889