



INSURANCE INDUSTRY

Insurance Industry Benefits by Partnering With Spill Center™

SPILL CENTER WHITE PAPER

Since 1990, Spill Center™ has provided emergency response resources, regulatory reporting, environmental claims management and communications systems to government and industry worldwide. Now **Insurance underwriters** working with clients at risk for environmental spills of hazardous materials, fuels and other regulated substances can offer more competitive rates, minimize payouts and loss ratio, reduce risk exposure and close claims faster while offering value-added services that set their companies apart by partnering with Spill Center™, the North American leader in environmental spill support and environmental claims management.

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SPILL CENTER WHITE PAPER

Insurance Industry Benefits by Partnering with Spill Center™

By Thomas Moses, Esq.
President, Spill Center™

Abstract

Spill Center™ is the North American leader in environmental spill support and environmental claims management, serving clients in a broad range of industries, including the insurance industry. Spill Center offers a 24/7 program tailored to the specific preferences of insurers that provides systems for immediate spill response, cleanup management, waste disposal, documentation and regulatory reporting that help insureds avoid delays in getting assistance after accidental releases and avoid fines and penalties for non-compliance with environmental regulations. Spill Center helps clients navigate the regulatory maze and provides immediate support after spills requiring cleanup and reporting.

Helping Clients Respond to Environmental Spill Emergencies

Spill Center™ has been serving clients whose operations put them at risk for environmental releases of hazardous materials and other regulated substances since 1990. In that time, the company has grown to become the North American leader in spill support and environmental claims management. Based in Hudson, Massachusetts, Spill Center serves a diverse client base, including motor carriers, shippers, truck leasing and rental companies, industrial service providers, chemical and manufacturing companies, some of the world's largest insurers, and ship owners and vessel management companies.

The mission of Spill Center is to help clients contain costs and limit potential liability after pollution events on the road, at sea and at their facilities. The Spill Center team is on call 24/7, 365 days a year, to provide:

- Immediate spill management
- Comprehensive regulatory expertise
- Timely, accurate spill reporting
- Automated alerting of key managers
- Spill contingency planning
- Cleanup contractor referrals
- Coordination of cleanup operations
- Invoice auditing to save clients money
- Thorough documentation of spills

- Claims resolution and negotiation
- Spill training for clients' employees
- Integrated mobile app for spill alerting

Spill Center has developed a proven method to place clients in a legally defensible position against third-party claimants and avoid being included as a responsible party to a pre-existing contamination problem. With a single call, website message or contact through the Spill Center mobile app, spill generators can get help finding cleanup contractors, completing required reports and thoroughly documenting incidents. The Spill Center team does it all in a low-cost way designed to help clients minimize costs and limit liability arising from environmental releases requiring cleanup.

Spill Center has a database with current reporting requirements and contact information for nearly 30,000 jurisdictions throughout North America. Listings and detailed information are maintained on more than 3,000 qualified cleanup contractors. By partnering with Spill Center, insurance companies can empower their insureds to quickly find proven contractors and get assistance with

regulatory reporting and cleanup coordination using customizable mobile applications and online tools. Spill Center offers insurers the ability to protect their organizations, increase sales and margins, and reduce risk, all by giving potential spill generators the support they need.

In the first seven months of 2017, 8,226 hazmat incidents in transportation had been recorded by PHMSA. Of those, 3,829 incidents involved unloading, 2,385 occurred in transit, 1,745 in loading, and 267 in transit storage. Damages as a result of the incidents totaled more than \$36.3 million.

Spill Center Expands Client Base in Insurance Industry

More and more insurers are responding to Spill Center's program. It is designed to contain costs and limit potential liability related to environmental spills of dangerous materials and other pollution events. Insurers partnering with Spill Center encourage their insureds to enroll in the program to improve their readiness to quickly report and respond to environmental releases of hazardous materials, diesel fuel and other regulated substances whenever and wherever they occur.


Insureds enrolled in the program are better prepared to handle environmental spills and pollution events, which can result in lower spill-related costs, directly benefitting the insurance company. Insurers enrolled in the program rely on Spill Center to provide expertise in spill management and regulatory matters to avoid fines and penalties for non-compliance with local, state/provincial and federal reporting rules.

Failure to comply with reporting requirements can produce heavy fines and penalties for spill generators. Reportable quantities of spilled materials vary from one jurisdiction to the next. Plus, spills often involve multiple jurisdictions, confusing the issue even further. The Spill Center program helps keep clients in compliance with the law after environmental spills. Plus, immediate help is only a phone call away.

Spill Center completes more environmental spill reports on behalf of clients than any other organization in the United States, filling out more than 300 US DOT Incident Report Forms each month as part of Spill Center's program of spill-related services for clients. Compliance associates handle all required spill reporting, provide listings of qualified cleanup contractors, help contain spill-related costs and limit potential liability, regardless of the extent of the spill.

Spill Center deals with environmental releases and other pollution events every day on behalf of clients, who invariably file claims with their insurers to recover spill-related costs. Since Spill Center began approaching insurance companies with a plan to enroll their insureds in a program to contain costs and limit potential third-party liability claims, the response has been very positive.

One insurance company that recently partnered with Spill Center reports that the savings began mounting up as soon as users started submitting spills through the program. "We started noticing a significant savings soon after we joined Spill Center, after users submitted about 30 spills," said the underwriter. "By addressing these emergencies in a timely manner through Spill Center, we have seen 20% to 25% in cost savings."



In just one generation, the production of man-made chemicals has increased by 40,000 percent, from one million to 400 million tons. – WWF: Toxic Chemicals

Spill Center's support program is designed to help spill generators deal with spill emergencies and required regulatory reporting without expending resources to build and maintain their own spill emergency response system. By managing spills throughout North America, Spill Center compliance associates know what works and what saves clients money.

Spill Center™ Mobile App Enables Fast Environmental Spill Reporting

Reporting an environmental spill or requesting assistance has never been faster or easier. By downloading Spill Center's spill reporting application for mobile devices, users can increase their readiness to respond quickly and get expert support from experienced Spill Center compliance associates. Spill Center Mobile provides the ability for users to report spills from anywhere using a mobile device and to immediately begin to respond, report, clean up and safely and legally dispose of spilled materials. User information and spill location are sent to Spill Center.

Spill Center's advanced mobile app features a dynamically generated dashboard of electronic tools, tailored to the user's profile – whether that's a truck operator, fleet manager, plant safety officer, insurance adjuster, or other user who needs immediate access to emergency response resources and incident reporting assistance. Available for Apple, Blackberry and Android devices, the app provides instant communication with Spill Center's 24/7 operations team to immediately begin coordinating the response and making all required incident reports.

Spill Center Mobile enables an intelligent, automated workflow, providing a link that gives the user everything needed to handle and report pollution events. Clicking on the app triggers a coordinated effort that includes communication with a Spill Center Compliance Associate who is

experienced in working with authorities at the spill site, completing required incident reports and managing cleanup and site remediation operations. Insurance adjusters who manage large claims are benefitting when their insureds use Spill Center's spill reporting mobile app. It lets them get involved within minutes of an incident and become proactive in helping the claimant mitigate the situation quickly, control spill-related costs and limit any potential liability.

Spill Center Mobile provides user ID, spill location information and the ability to request cleanup and safe disposal of spilled materials quickly and easily. When the user opens the app, a list of available Spill Center resources appears on the screen along with a map indicating the precise location of the spill. The user can select the type of assistance needed. The interface provides details about the spill to Spill Center, which begins coordinating an appropriate response and preparing incident reports.

The mobile app gives users the power of timely and accurate incident reporting to avoid fines and penalties for non-compliance with environmental regulations. It also provides the ability to respond quickly in order to mitigate damages and contain spill-related costs. An alert distribution feature is an integral part of the app, enabling users to create groups of contacts for various levels of notification. The user can also post photos of incidents to spill reports and review past incidents.

4.5 million facilities in the U.S. manufacture, use or store varying quantities of hazardous materials – U.S. Dept. of Homeland Security

Spill Center's Program Adds Value for Insurance Industry Partners

Some of the insurance companies partnering with Spill Center are Liberty International Underwriters (LIU), part of Liberty Mutual Insurance, Chubb Global and Berkley Custom Insurance. Zurich North America has been leveraging the resources and expertise of Spill Center to help its customers reduce costs and mitigate potential liability following environmental releases of dangerous materials since 2009.

Liberty International Underwriters (LIU) partnered with Spill Center™ to offer environmental policyholders a new program, "Liberty One Timely Accident Preparedness"(TAP). It is designed to improve a company's readiness to respond quickly and efficiently to pollution events and environmental releases requiring cleanup and reporting.

Liberty One TAP marks the first time that Spill Center has offered its online tool as a customer-facing mobile app, giving LIU customers immediate, direct access to response and reporting tools. Whether in the office or out in the field, LIU's customers can control activation of their emergency response plan, create and manage internal alert and communication systems, and identify the local incident reporting requirements. A unique aspect of the app is a mobile dashboard that is customized to each customer's business and is used to distribute alerts and interface with LIU's in-house team."

Spill Center provides LIU's customers with real-time communication and response capabilities, including access to Spill Center's 24/7 call center. That ensures adequate response is available anytime, anywhere – even at night and during weekends and holidays. When LIU's customers use the app, a Spill Center compliance associate immediately knows who they are and where they are and can quickly deploy spill response and reporting resources to support them.


Another insurance company client of Spill Center, ACE Environmental Risk, won the prestigious 2015 *Business Insurance* Innovation Award for a successful program based on Spill Center's technology and support network. "ACE Alert" lets the insurance company get involved within minutes of an incident to become proactive in helping the claimant mitigate the situation quickly, control spill-related costs and limit any potential liability.

The Guarantee, based in Toronto, Canada, was named a finalist in the 2015 Insurance-Canada Technology Awards competition. The company was nominated for its "Go-To Solution" microsite and mobile app, based on technology from Spill Center. The online incident-reporting tool gives transportation customers easy access to insurers.

Insurers register with Spill Center to offer added value to their customers in the areas of spill response and regulatory reporting. The program enables them to avoid any delays in getting assistance after environmental releases. All activities completed on behalf of clients are documented and can be used to defend against third-party liability claims.

Insurers offer Spill Center enrollment to their insureds at no cost; insureds pay only for services they request. Once registered with Spill Center, they can quickly get help with emergency response, including cleanup contractor listings throughout North America and assistance with required local, state, provincial and federal incident reports.

Regulatory reporting is a critical aspect of Spill Center's services because up to a dozen different reports might be required after an environmental release, depending on the jurisdiction and type of spill. The authorities take their regulations very seriously, and failure to comply with reporting regulations can result in significant fines and penalties.



Diesel fuel, gasoline and kerosene are among the substances that fall under the Hazmat Classification of Flammable Liquids. PHMSA

Spill Center's resources help insurance companies provide improved communications and faster involvement with insureds. That results in fewer issues with invoice negotiation on the backend. Insurance company customers enrolled in the program are better prepared to handle environmental spills and pollution events, which can result in lower spill-related costs, directly benefitting the insurance company. The program enables them to quickly get help with emergency response and completion of required local, state, provincial and federal incident reports. All activities completed on behalf of clients are documented and can be used to defend against third-party liability claims.

The program is tailored to the insurers' preferences. Systems have been developed by Spill Center for spill response, documentation and reporting. Insurance companies have partnered with Spill Center to offer their insureds spill response and reporting services to avoid any delays in getting assistance after accidental releases.

Spill Center is a Technology Company Offering Unique Applications

Spill Center is leading the way in technology-driven applications that speed up the spill support and reporting aspects of environmental releases and other pollution events. Spill Center is

headquartered in a modern facility in Hudson, Mass., which provides an advanced cybersecurity environment and the high-speed Internet connectivity needed to ensure clients' privacy and information protection. Spill Center's operations are all data-speed and security driven. As the company develops more and more sophisticated technology in conjunction with its environmental claims management services, additional technical capabilities will be required. Cybersecurity is of utmost importance. The requirements are becoming more ubiquitous across all types of business relationships. As Spill Center services move into Europe, South America and Asia, the company will encounter different cyber security standards. Spill Center is keeping up with them to make sure the systems will meet the needs of customers everywhere.

The company was founded in 1990 on the belief that no company will ever have enough spills to justify creating and maintaining all the spill resources needed for adequate protection from environmental exposure. Spill Center is developing global standards to offer the spill support program in foreign countries, enabling clients to contact Spill Center in their own language for non-English speaking customers and insurers with worldwide operations. They will be able to contact Spill Center by phone, using a mobile app or via the secure Spill Center website.

They will also be able to fill out spill reporting forms at the website in their own language, and Spill Center will provide the support they need through a global network. To date, testing has been

Highway hazmat incidents totaled 16,507 in 2016, according to PHMSA, more than 90% of the total of all air, rail and water incidents reported.

conducted in 19 different countries. The program will be rolled out first to Europe, then to other regions of the world. German language services are currently being developed. Spill Center services have been available in English-speaking East Africa since 2011.

Spill Center strives to save clients money, limit potential liability

Spill Center offers clients a comprehensive range of spill management services to contain costs, limit liability and keep them out of trouble with the regulatory authorities:

- **Contingency Planning** – Spill Center assists clients with custom spill contingency planning for each activity with the potential to produce a spill emergency. The plan, which is kept on Spill Center's password-protected, integrated website for instant access, is the key to efficient coordination of the cleanup and reporting.
- **Required Spill Reports** – Spill Center contingency associates can make all required incident reports within the mandatory reporting window. A database contains the latest regulations and contact information for local, state/provincial and federal jurisdictions throughout North America to ensure compliance and avoid fines and penalties.
- **Cleanup Contractors** – Listings of more than 3,000 environmental cleanup contractors are kept on file with complete information on each company, including certifications and equipment. The client chooses from a list of contractors nearest the spill site. Spill Center receives no compensation for referrals.

- **Cleanup Management** – Spill Center helps clients contain the costs of spill cleanup and site remediation by coordinating the response and actively managing the contractors on site. The Spill Center team communicates with emergency and environmental officials at the scene and keeps clients in the loop throughout.
- **Informed Decisions** – Spill Center helps clients make informed decisions on the best response to every spill – whether to have employees clean it up or call in contractors. Incidents are evaluated in real time, and the client is advised on how to respond in a fast, cost-effective manner while keeping employees safe.
- **Expert Consultancy** – Spill Center retains consultants with expertise on a range of technical topics to challenge official findings by environmental regulators that could be very costly to clients. In addition, Spill Center has on staff experienced legal, technical and environmental specialists.
- **Document all Activities** – Thorough documentation of all reporting and remediation activities performed on behalf of clients is provided to limit environmental liability and establish a legal defense against any third-party claims that might arise from spills.
- **Invoice Auditing** – Experienced auditors are available for expert review of charges from cleanup contractors, emergency responders and other service providers to ensure fair pricing (based on accepted standards) and accuracy. Any inflated charges are negotiated downward by Spill Center.
- **Automated Systems** – Proprietary systems developed by Spill Center are designed to track incidents, produce standard and customized reports to identify conditions and trends, and generate root-cause analysis data for clients. The information can be used to improve safety.
- **Spill Training** – Spill Center training sessions are available to teach a client's managers, employees and customers how to activate their own emergency response management and reporting systems to minimize costs and liability arising from a hazmat, fuel or chemical spill. Included is an interactive workshop, hands-on exercises and an "Ask the Expert" session.

Spill Center's clients are always in control of which services they want Spill Center to provide and which ones their employees will handle. Clients pay only for the services that they request. The Spill Center program is designed to improve the client's preparedness to handle spills efficiently and cost-effectively and avoid making wrong decisions that could cost plenty.

TESTIMONIALS

Insurers See Cost-Saving Benefits of Spill Center Program

Liberty International Spill Response Program – Liberty International Underwriters (LIU), a division of Liberty Mutual Group, offers a spill support program to environmental policy customers that coordinates emergency response, assistance finding cleanup contractors and disposal sites, and expertise in regulatory reporting. The Liberty “Timely Accident Preparedness (TAP) Program” benefits LIU customers who are at risk from environmental releases of hazardous materials, petroleum products and other regulated substances.

“The mission of this program is to help our customers mitigate and control environmental damage, contain spill-related costs and avoid fines and penalties for non-compliance with incident reporting regulations. We believe that Spill Center’s systems have broad applicability across the Liberty Mutual business, including Environmental Impairment Liability and Cyber Risk coverages. Spill Center’s role is to provide an immediate response by capable and qualified personnel to environmental incidents and to keep all interested parties informed and engaged on a real-time basis, using technology for a quick and effective response.

– William Bell, LIU Senior Vice President, Environmental

ACE Environmental Risk Honored – ACE Environmental Risk, a company that insures customers against hazardous spills, received the prestigious *Business Insurance* Innovation Award for a program it launched in 2015 that supports customers who become involved in environmental releases of hazardous materials and other pollutants. ACE developed the program in partnership with Spill Center. Called ACE Alert, the program enables its policy holders to immediately notify the insurer to begin coordinating an emergency response to the spill, including mandatory reporting, site cleanup and remediation.

“The ACE Alert program lets the insurance company get involved within minutes of an incident to become proactive in helping the claimant mitigate the situation quickly, control spill-related costs and limit any potential liability. It enables ACE to provide improved communications and faster involvement with insureds for fewer issues with invoice negotiation on the backend.”

– Comments of independent panel of risk managers

The Guarantee is Finalist for Reporting Tool – The Guarantee, based in Toronto, Canada, was named a finalist in the 2015 Insurance-Canada Technology Awards competition for its “Go-To Solution” microsite and mobile app, based on technology from Spill Center. The incident-reporting tool can be used 24/7 to report a claim, create alerts, add distribution lists, and find a cleanup contractor. Since 2010, Insurance-Canada.ca has presented awards for the innovative use of technology in the Canadian P&C industry.

*“The awards were established to celebrate organizations in the Canadian Property and Casualty Insurance industry whose implementation and use of technology shows **a significant impact** on a process or group of processes used in the sale, processing and servicing of insurance in Canada.”*

– Insurance-Canada Technology Awards Organization

Coordination and Support for Ships at Sea – Spill Center coordinates quick response and expert consultation for the Q88 Response Center, which handles chemical spills/incidents and medical emergencies occurring onboard vessels at sea. The center is operated in partnership with Q88 LLC (a unit of Milbros Systems), a technology leader in vessel management software systems for the tanker and dry bulk industries. Another Q88 partner is Future Care, Inc., a leading provider of medical care management services to the maritime industry.

“The Q88 Response Center is available to handle any issue related to chemical incidents or environmental spills requiring cleanup and reporting. Leveraging the resources of Spill Center, we can provide expert advice, resources and contractors to assist with mitigation of incidents and cleanup of spills at sea or in port. These resources are invaluable to Masters, Company QI and ship managers in an emergency.”

– Capt. Soren C. Ibsen, VP Milbros Systems

About the Author

Thomas Moses, Esq., founded Spill Center™ in 1990. He is a former U.S. Environmental Protection Agency toxicologist who holds a Juris Doctorate degree and a Certificate in Hazardous Materials Control and Emergency Response. He worked in the insurance industry, providing environmental claims and spill management expertise. Also, as a legal specialist for Standard Oil, he interpreted safety and environmental regulations, developing legally defensible compliance procedures. He has served as Secretary of the Commercial Vehicle Alliance Security Committee and as a panel chair for the National Academies' Transportation Research Board.

KEY RULES & REGS WHEN SHIPPING HAZARDOUS MATERIAL

A SHIPPER MUST

- Identify and classify all hazardous materials relating to the shipment
- Determine the hazard class associated with the shipped material
- Assign each material to a packing group as applicable

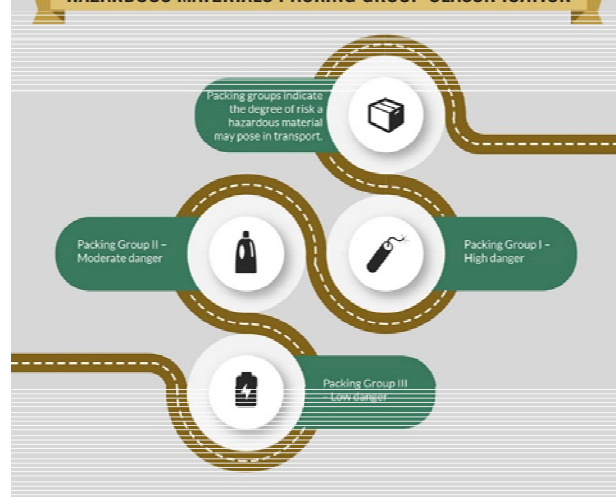
HAZMAT CLASSIFICATIONS



SIGNIFICANT & RECENT SPILLS



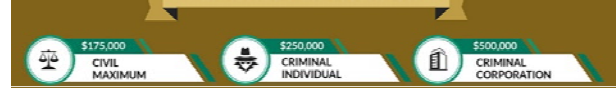
HAZARDOUS MATERIALS PACKING GROUP CLASSIFICATION



PACKING GROUP HAZARD CLASSES



PENALTIES PER VIOLATION



The average amount of fuel released for commercial vehicles is over 100 gallons, and the average cost per incident is nearly \$15,000.

If you have Care, Custody and Control of the shipment - you can be held responsible for the damages and clean up!

Rule #1: Contact Spill Center for real-time incident response, using customizable mobile applications and online tools, to control your costs and limit your liability.

PHMSA Offers New Mobile App for Code of Federal Regulations

The U.S. Dept. of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) has developed a new online Code of Federal Regulations Mobile Application (oCFR) that is a simplified version of the web-based application which was released to the public in March 2016. Available in the Apple App Store and Google Play Store for use of iOS and Android mobile devices, the oCFR app provides the first-ever access to search, view, and navigate the Hazardous Materials Regulations (HMR) in 49 CFR parts 100-180 for the classifying, handling and packaging of hazardous materials by highway, rail, aircraft and vessels. Those regulations indicate which types of hazmat incidents must be reported to PHMSA.

Section 171.15 of the HMR requires an immediate telephonic report (within 12 hours) to the National Response Center. Section 171.16 requires a written report for certain types of hazmat incidents within 30 days of the incident, and a follow-up written report within one year of the incident, based on certain circumstances. Additionally, the Incident Report Form 5800.1 is a guidance document for preparing incident reports and tabular summaries of hazardous materials incidents by mode, year, state, hazard class, etc.

The mobile app also provides the first mobile access to PHMSA's Pipeline Safety Regulations in 49 CFR parts 190-199, which provide the federal minimum safety standards for the design, construction, operation and maintenance, and spill response planning for pipeline and liquefied natural gas facilities involved in the transportation of natural gas and hazardous liquids within the U.S. Today, more than 2.5 million miles of pipelines deliver oil and gas to communities and businesses across the U.S., according to PHMSA. The mobile app is also unique in that it allows users to navigate regulations at the paragraph level.

FASCINATING Environmental & Chemical SPILL FACTS



4.5 million facilities in the U.S. manufacture, use or store varying quantities of hazardous materials. (Department of Homeland Security)



Spill control for liquids is required when rooms/buildings or areas used for liquid storage hold containers with a capacity of 55 gallons (208 liters) or where the aggregate capacity of multiple vessels exceeds 1,000 gallons (3,785 L). (FEMA)



There have been an estimated 3,000 significant pipeline spills in the U.S. since 2006. (Eco Watch)



Trains spilled 1.4 million gallons of oil in 2013, the record year for volume of oil spilled - more than the previous 40 years combined. (NBC News)



Between 2004 and 2014, the number of collisions and derailments involving trains carrying hazardous material fell by more than half, from 31 to 13. (Association of American Railroads)



OIL SPILL FACTS:

TYPES OF OIL SPILLED IN NORTH AND SOUTH AMERICA (TCKTCKTCK.ORG)

46%

Crude oil

45%

Tar sands oil and diluted bitumen

7.7%

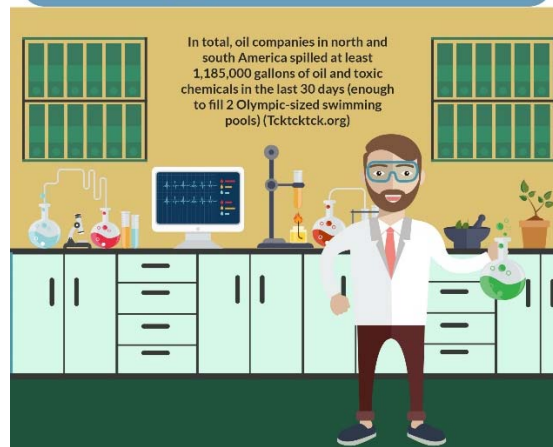
Tailing pond waste fluid

.05%

Hydraulic fluid

.002%

Condensate



Over 400 million tons of hazardous wastes are thrown out in a year. (United Nations Environment Program)



That's over 13 tons every second. (United Nations Environment Program)



The rate of hazardous wastes being thrown out is almost 60 kg for every single person in the world. (WWF: Toxic Chemicals)



In just one generation the production of man-made chemicals has increased by 40,000% from 1 million to 400 million tons. (WWF: Toxic Chemicals)



Every year, 2.12 billion tons of waste is dumped in the oceans. If this waste was put on trucks they would go around the world 24 times. (United Nations Report)

In 2015, there were 16,846 transportation hazardous materials incidences in the U.S. (USDOT National Transportation Statistics)

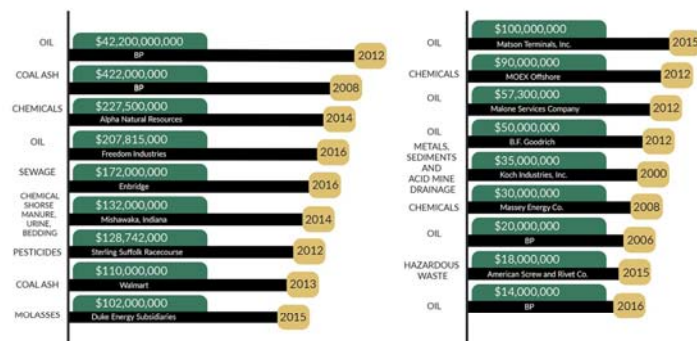


SPILL CENTER

www.SpillCenter.com

TOP SPILLS, FINES, PENALTIES & CLEANUP

COSTLIEST ENVIRONMENTAL U.S. SPILLS



EPA 2016 CIVIL FINES & PENALTIES

Monetary Commitments from Concluded Cases 2016	Commitment
Judicial Penalties Assessed	\$5,746,000,000
Administrative Penalties Assessed	\$44,000,000
Estimated Investments in Projects that Benefit the Environment and Public Health	\$32,000,000
State/Local Judicial Penalties Assessed	\$17,000,000
Stipulated Penalties Paid	\$14,000,000

EPA 2016 CIVIL FINES & PENALTIES 2016 CIVIL ENFORCEMENT RESULTS



EPA 2016 CIVIL ENFORCEMENT RESULTS



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