

Toxic Torts and Environmental Law

The newsletter of the Toxic Torts and Environmental LawCommittee

12/03/2020



Volume 23, Issue 1



WHAT HAPPENED? Complex Questions Answered.



Committee Leadership



Chair William J. Hubbard Thompson Hine LLP Cleveland, OH



Vice Chair **Kimberly Leue Bick** Bick Law LLP Newport Beach, CA



Newsletter Editor Susan E. Van Gelder Goldberg Segalla Buffalo, NY

Click here to view entire Leadership

In This Issue

Leadership Note

From the Chair	2
By William J. Hubbard	

Legal News

New York Takes Next Step in Nation-Leading	
Offshore Wind Efforts 3	,
By Scott Press and Larry Mason	

Feature Article

"The Dose Makes the Poison": Incorporating the Concepts of Exposure and Dose into Your Witness By Paul Benson, Emily Goswami, and Michael McCoy

For Major Personal Injury Cases Involving **Toxic Torts, RPC Gives Defense Counsel Critical Analysis of the Plaintiff's Damages**

• LIFE CARE PLANS

- MEDICAL EXAMINATIONS
- NEUROPSYCHOLOGICAL **EVALUATIONS**
- REASONABLENESS OF CHARGES FOR MEDICAL EXPENSES
- VOCATIONAL EVALUATIONS
- LOSS OF EARNING CAPACITY
- LOSS OF ECONOMIC SUPPORT

Call 512.371.8000 or visit www.rpcconsulting.com



Build Your Case on Sound Science

Product Liability and Warranty Claims Infrastructure Components Industrial Equipment **Consumer Products**

Environmental & Toxic Torts Industrial Hygiene Nuisance Dust



From the Chair

By William J. Hubbard



At DRI's Virtual Annual Meeting, I was honored to be appointed chair of the Toxic Tort and Environmental Law Committee. Fortunately, I have inherited a very strong committee thanks to the hard work of prior chairs Carmen

Toledo, John Guttmann, Tim Coughlin, and Daniel McGrath. Congratulations to Carmen as she was elected a national director by the DRI Board of Directors. Kim Bick has assumed the vice chair position, and she and I will be calling upon all of you to help continue the success of the committee.

In February 2011, I found myself in New Orleans sitting in the audience of my first Toxic Torts and Environmental Law Seminar. I could not have imagined that nine seminars later, I would be chair of the committee. I went from knowing only a handful of people at that first seminar, most of whom were from my firm, to knowing easily more than a hundred at our last seminar in Phoenix.

That is what has made this past year so difficult—the inability to see each other and network in person. We were fortunate. Our seminar in February was one of the last DRI seminars to be live before COVID-19 forced nearly everything to shut down. Who could have thought at that conference that our practices, from court hearings to depositions to networking, would go virtual. (I can assure you I had no idea, as evidenced by the fact that I had just bought four new suits in January). The TTEL Steering Committee held its "fly-in" via Zoom in June and the Annual Meeting was held virtually in October. I commend the planning committee for the Virtual Annual Meeting. It was very well done and the CLE content and main stage speaker presentations were as great as always. Our Committee combined with Women in the Law, Diversity and Inclusion, and DRI International to host the CLE breakout session, "Effective Communication Across Difference in the Age of Polarization and Fake News." The content was very timely. Kudos to Carmen for organizing a number of Zoom happy hours over the past few months to keep us connected.

COVID-19 has reaffirmed that, in my opinion, DRI's greatest value is the networking opportunities—and no matter how comfortable we get with Zoom, nothing beats getting together in person. As we head into what appears to be the predicted second wave of COVID-19 cases, there is news of promising vaccines that will hopefully speed our recovery and get us back to meeting in person. Only time will tell if our February 2021 seminar will go forward as planned. DRI is currently working on a contingency plan to move our seminar to the second or third quarter if necessary. Our seminar chairs, Kim Bick and Jen Dlugosz, have put together a phenomenal program. I hope that the stars align and, if we do not see each other in person in February, we see each other later in the year. Until then—stay safe.

William J. (Bill) Hubbard is a partner in Thompson Hine LLP's Product Liability and Construction practice groups. He focuses on mass tort and class action litigation and risk avoidance concerning commercial, consumer, and building products, and claims involving architects, engineers, and other construction professionals. He regularly appears in numerous cases throughout the United States and is a member of the Society of Chemical Manufacturers and Affiliates and the Ohio Chemistry Technology Council. Bill is chair of the DRI Toxic Torts and Environmental Law Committee.

New York Takes Next Step in Nation-Leading Offshore Wind Efforts

By Scott Press and Larry Mason



The deadline for submitting proposals in response to New York's second solicitation for offshore wind procurement recently expired, with three companies in

the running to land contracts, including Vineyard Wind, Equinor Wind, and Bay State Wind (a joint venture of Ørsted A/S and Eversource Energy). Each submitted proposals in response to New York Gov. Andrew Cuomo's July 21, 2020, solicitation for 2,500 megawatts of offshore wind energy. These proposals followed along the heels of the state's 2018 solicitation for 1,700 megawatts of offshore wind, which could bring New York nearly halfway to its goal of 9,000 megawatts of offshore wind by 2035.

The recent submissions come from familiar faces in the offshore wind industry, as the contract's awarded in 2019 include Equinor Wind's 816 megawatt Empire Wind Project, and Sunrise Wind's— another joint venture of Ørsted A/S and Eversource Energy—880 megawatt Sunrise Wind Project. The newcomer in the latest round of proposals is Vineyard Wind, which is no stranger to offshore wind projects in the east coast, as it has an 800 megawatt project underway in Massachusetts called Vineyard Wind 1 and procured an 804 megawatt project in Connecticut called Park City Project in 2019.

In response to the latest solicitation, Vineyard Wind's Liberty Wind proposal includes six different project options accounting for up to 1,300 megawatts of offshore wind power, located 84 miles east of Montauk Point. Equinor's proposal includes two projects, Empire Wind Phase 2, which is located 15-30 miles southeast of Long Island, and Beacon Wind, located 60 miles east of Montauk Point. Finally, Bay State Wind's proposal, Sunrise Wind 2, includes multiple project configurations that are expected to expand upon Bay State Wind's Sunrise Wind 1 project, which was awarded last year.

In addition to the offshore wind proposals, New York's solicitation also sought a complementary multi-port infrastructure investment. Although few details regarding the infrastructure improvements are disclosed in the public release of the Liberty Wind project, Vineyard Wind did confirm that its bid includes a community engagement plan to put disadvantaged communities at the forefront of its efforts to maximize the benefits of the project. The advantages they outline include economic development, job creation, and environmental benefits.

Meanwhile, Equinor has disclosed that it plans to use the South Brooklyn Marine Terminal for construction activities and its operations and maintenance plan, and plans for manufacturing offshore wind components further upstate at the Port of Coeymans and the Port of Albany. The Sunrise Wind project proposal is reported to include port infrastructure investment plans that would support the revitalization of New York's maritime infrastructure, and would include a partnership with Con Edison Transmission to support the development of transmission facilities to deliver offshore wind to the electric transmission grid.

The latest clean energy development initiatives are expected to result in nearly \$7 billion in direct investments to the state and to create approximately 4,500 jobs.

Larry D. Mason is a partner in Goldberg Segalla's environmental law group in Chicago. He is a renowned trial and appellate litigator and counselor to many national and international businesses across diverse industries. Based in Chicago but with experience litigating and counseling clients through complicated and high-profile matters across the country and internationally, he dedicates most of his practice to insurance coverage, reinsurance, commercial litigation, environmental and toxic torts, and complex insurance regulatory matters. He also focuses on professional liability for clients in construction, environmental, and related industries; products liability; and identifying emerging risks. He brings his extensive experience to leadership positions in the firm, where he is chair of the Environmental and Mass Torts Coverage and Construction Coverage subgroups.

Scott M. Press is an associate in Goldberg Segalla's environmental law group in White Plains, New York. He focuses his practice on complex litigation involving environmental law and land use, representing clients in environmental litigation claims, regulatory and compliance counseling, and enforcement. Scott provides clients with an in-depth knowledge of state and federal environmental regulations including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), Clean Water Act, and others. He routinely handles complex environmental litigation matters, as well as regulatory enforcement and compliance matters including hazardous waste, site remediation and federal and state cost recovery and contribution claims.

Feature Article

"The Dose Makes the Poison": Incorporating the Concepts of Exposure and Dose into Your Witness Questioning Strategy

By Paul Benson, Emily Goswami, and Michael McCoy

You will often hear the phrase used in toxic tort cases, "The dose makes the poison." It is attributed

to Paracelsus (1493–1541), known as the father of toxicology. Paracelsus actually stated (translated from German), "All substances are poisons, there is none which is not a poison. The right dose differentiates a poison from a remedy." A classic example of this is water. Drinking several glasses in a day will hydrate the body and is part of a healthy lifestyle. Drinking multiple gallons in a day can be lethal.

Another phrase that should be a focus in toxic tort cases is "intensity, frequency, and duration." These concepts are critical to a proper understanding of exposure and dose. In legal matters, exposure scientists, who include industrial hygienists, occupational medicine physicians, and toxicologists (among others), rely on attorneys' lines of questioning to characterize and conceptualize an alleged exposure to an occupational or environmental toxicant, and its corresponding dose, for the trier of fact. A retained defense expert exposure scientist is often asked to calculate a hypothetical dose for a toxicant associated with plaintiffs' use, or work proximal to, a specific product. In order to do this, the defense attorney must have a clear understanding of the parameters of the exposure that is needed to calculate a dose, so that the expert has a valid basis for dose calculations. This is the product of exposure intensity (or concentration), exposure frequency, and exposure duration.

A well-developed line of questions of fact witnesses will provide an exposure scientist with the necessary insights into a plaintiff's exposure intensity, frequency, and duration to occupational or environmental toxicants. This article is intended to assist attorneys in formulating lines of questioning for a fact witness that can assist an exposure scientist in developing an accurate dose determination to assess the question of cause in toxic tort cases.

A Hypothetical Toxicant Exposure Context

Let us assume a toxic tort claim has been filed in which the plaintiff's pathologically confirmed leukemia is claimed to be causally associated with exposure to benzene. The exposure scientist has been retained on behalf of the defendant, who manufactured a consumer product in the late 1960s which contained Stoddard solvent. It is known that Stoddard solvent may have contained approximately 0.5 percent benzene by volume during the same time frame. It is important to consider that Stoddard solvent is a generic term, and one can only determine the precise benzene content if the formulation is available. Regardless, the plaintiff was an auto mechanic hobbyist who claims he utilized the defendant's consumer product during mechanical work (engine rebuilding) on his personal vehicles at his home.

The defense exposure scientist has been asked to calculate a lifetime dose of benzene from the plaintiff's use of this product and opine on the probability or risk of the potential for adverse health effects. In this example, the dose will be measured in ppm-years of benzene, which is the product of the intensity, duration, and frequency of benzene exposure in years and the airborne concentration of benzene in parts-per-million (as air volume).

Establishing Product Identification

The first parameter for establishing dose is confirmation of the plaintiff's exposure to the defendant's product. This is referred to as "product identification." For obvious reasons, this parameter must be established before the exposure scientist can provide an expert opinion. If the defendant's product is not identified, the exposure scientist cannot calculate the dose necessary to be a potential cause of harm.

Questions on this topic will probe whether the witness can identify the correct product, the product's formulation, and the time frame in which the product was produced by the defendant using Stoddard solvent. Can the witness identify the defendant's product labels and markings, and does he recall any information about the product's labeling, container, consistency, color, and odor? Indeed, defense counsel must determine if the defendant's product could be confused with a different product made by a different manufacturer. Do not allow the plaintiff or witness to use common monikers such as, "Kleenex" in lieu of "facial tissue" or similar tradenames for identifying the defendant's product. It is common for witnesses to identify groups of similar products with similar use profiles as a trade name component. Were alternative brands used in a similar fashion? For example, did the plaintiff use multiple brands of a similar product with the same use profile? If so, delineate the percentage use of each product and their associated timeframes of use. Additionally, were alternative products from a different class used occasionally in lieu of the defendant's product? For example, if the hypothetical defendant's product was spray applied to bolts to loosen them during disassembly, when the bolts were unable to be removed using the defendant's product, how were they removed? Were other products used? If so, how frequently did this situation occur?

Duration and Frequency Parameters

Assuming the defendant's product has been identified, **the defense attorney must lay a foundation for the exposure scientist to evaluate a plaintiff's duration and frequency of exposure**. In our hypothetical, since the plaintiff used the product as a hobbyist, it cannot be assumed it was used for a duration of years or months, without considering the frequency of use of the product on a daily, hourly or even minute basis. The actual use of the product and the timing of that use must be pinned down. For example, how was it applied (spray or brush), and what was the duration (in minutes or even seconds) of the application? How many applications per day? How often was the hobby performed? How many days per week, months or year? Were there periods of time when the hobby was not performed, *e.g.*, during periods of illness, vacations, or other conflicts? If the plaintiff in this hypothetical testified that he worked 50 hours per week in his fulltime construction job, and had three children who participated in sports that he coached, it will be important to clarify the actual amount of time in which he performed his engine-rebuilding hobby.

"Book ending" the periods of exposure is important. If the plaintiff claims to have started using the defendant's product in 1950 and ceased using it in 1969, do not allow that testimony to stand without further inquiry. Ask questions designed to obtain the most accurate starting and ending dates of product use. While many witnesses cannot recall exact dates, try aligning them with historic events. Something like, "Do you recall the moon landing in 1969?" And then following with, "Do you recall if you were using the defendant's product before or after the moon landing?" This may help delineate the specific periods of duration. In addition, personal timestamps can be useful, for example, "Did you live in your house on Oak Street when you used that product?"

It is important to understand and contrast other work performed by the plaintiff that did not involve the defendant's product. It is not realistic for an individual to have used the defendant's product during the entirety of his hobby. In our hypothetical, the plaintiff hobbyist performs rebuilding work on engines in his garage. Did he perform other automotive work at the same time, such as brake repairs, or auto body work? How often did he use the defendant's product during the engine work, as opposed to not using it? Was it just when disassembling the engine or reassembling the engine? If possible, get a step-by-step description of his engine rebuilding process so the exposure scientist has a better understanding of the plaintiff's exposure duration and frequency. How long does the disassembly take, and what other steps are involved with the engine work? Can the witness identify the specific duration of the use of the defendant's product during the engine rebuild? Did he have assistance with his hobby work, and what role did the assistant play? A thorough exploration of these parameters will assist the exposure scientist in assessing frequency and duration of exposure.

Determine if the product use aligned with the manufacturers' intended uses. While manufacturers cannot control how a consumer may use a product, if the product was not used in accordance with the defendant's instructions, the attorney should develop questions to understand those uses and inquire as to why alternative products were not selected. Often abnormal duration and frequency of exposure can be explained by product misuse. For example, if the plaintiff claimed the product was used to prepare the engine body for repainting, does that align with the product's use as indicated on its labelling and instructions. And is it in sequence with normal engine rebuilding? Does the plaintiff or witness use the product for durations that would be unnecessary, or inconsistent with use patterns discussed on the label, or observed in recognized automotive procedures? If the plaintiff claims he spray-applied the product for 30 minutes to each engine, the exposure scientist can certainly refer to the label and learned treatises to critique the use of the product in this manner from the standpoint of exposure duration and frequency.

Exposure Intensity (Concentration) Parameters

Understand how the product was handled, utilized or **applied**. Was the defendant's product applied via spray application or brush application? Depending on the answer to that guestion, the airborne concentrations of benzene may vary substantially, and this allows the exposure scientists to evaluate the scientific literature and select a surrogate exposure concentration most appropriate for the described work task. In most toxic tort matters, actual airborne concentrations of the toxicant have not been measured. Thus, the exposure scientist will often identify surrogate concentrations that most closely resemble the work performed using the toxicant. In this hypothetical, if the defense attorney can clarify the work processes, the exposure scientist can select an accurate surrogate for airborne concentration. If there is no available literature to facilitate a surrogate exposure, consider having the expert conduct a dose-reconstruction specific to the defendant's product. If products are no longer available, perhaps it can be re-formulated based on the defendant manufacturer's specifications.

Ventilation is often an important consideration. Was the product used indoors or outdoors? If used indoors, attorneys should question the witness regarding the presence of windows and doors, air conditioning and heating appliances. Did the windows and doors remain open during the duration of the work? When were the windows open and doors open? Most mechanics left their garage door open, and often windows open too for comfort purposes during the warmer seasons, and "shade tree mechanics" get their name from working outdoors. In our hypothetical, it would be important to identify which season(s) the hobby work occurred. If the defendant's product was used outdoors, it may be valuable to ask about wind and weather conditions in which the plaintiff recalls performing the work. Determine workplace dimensions. If the work was performed in an enclosed area, the attorney should ask about the dimensions of the space. What was the layout, the ceiling height, and width of the work area. If possible, have the witness sketch out the space with estimated measurements and the location of where the work was performed within the space. These parameters give the exposure scientist the tools to perform contaminant modeling or, again, may assist in selecting an appropriate surrogate air concentration.

Determine distance from the contaminant source. During and after application of the defendant's product, what distance did the plaintiff maintain from the source? Distance plays an important role in determining airborne concentrations of a contaminant. What time was required for the product to dry? For example, if the plaintiff spray-applied the product, and allowed it to set for 10 minutes, did he leave the area and perform other work, or remain in the area while it dried? It is most likely the airborne concentration of the toxicant will be highest nearest the source, and would be non-existent if the plaintiff left the work area completely.

Attorneys should always inquire if personal protective equipment was used by the plaintiff - in this hypothetical, ask about respiratory protection. Surprisingly, many workers and hobbyists, even during the 1960s and 1970s used some sort of respiratory protection, such as a dust mask or a respirator. From a terminology perspective, they should be asked to describe the respiratory protection in detail. By the number of head straps, the composition of the mask (*i.e.* paper, rubber) and if the respirator had cartridges. If possible, attempt to gather information regarding the brand/make of the dust mask or respirator. Ask if an odor was present in the space and whether the witness can describe the odor during dust mask or respirator use. Respiratory protection has assigned protection factors, and under certain circumstances these factors can be applied to adjust the airborne contaminant concentration when calculating the dose.

Determine the volume of product used. This can be done with questions that attempt to quantify the use of the defendant's product. An attorney could ask, "Do you recall how many cans of this product you used per year?" Surprisingly, witnesses may claim they used the same product over the lifetime of their hobby, which provides information regarding the volume of use. Sometimes they still have the product available in their homes, and under certain circumstances testing of this product or real-time modeling can be performed. In the absence of concentration data, the volume and content of a toxicant in the product can be used to roughly estimate a "worst case" exposure scenario in which an individual is exposed to all the mass of toxicant in the container(s). For products with very low content, this worst-case dose may pose a de minimis risk, indicating the actual risk is also de minimis or even non-existent.

Determine if the contaminant exposure concentration changed over time. Consumer products may change over time, and it is critical to determine if that occurred with the defendant's product, and/or any alternatives or other brands that plaintiff may have used. Specifically, did the product formulation change? The attorney can and should ask if the witness recalled a change in the labeling, formulation, product consistency or use parameters at any time during the period of alleged use.

Clarifying Alternative Exposures

Alternative exposures to the toxicant is also an important factor that must be considered. In the case of benzene, it is a component of gasoline, and during the 1960s may have been over 1 percent by volume. Determine if the plaintiff ever used gasoline for any of his hobbyist or other work. How frequently did he fuel his personal vehicles, lawn mower, etc.? Did he utilize gasoline for degreasing or cleaning his hands, tools or surfaces? What other consumer products did he utilized around his house that also contained benzene, and what was the intensity, duration and frequency of those exposures? Attorneys should specifically identify products with benzene and granularly inquire about exposures. This will arm the exposure scientist with additional information that can be incorporated into a dose analysis that includes alternative exposures.

Regarding benzene exposure, cigarette smoke contains a considerable amount of benzene, which is intentionally inhaled, and thus learning the plaintiff's smoking history is also important in this hypothetical. When evaluating smoking history, it is important to characterize the number of packs-per-day and the duration of cigarette smoking, as it is also calculated as a dose in terms of pack-years. Second-hand smoke is also a source of benzene exposure, so the smoking history or habits of household contacts or co-workers is also relevant.

In addition, for certain toxicants, environmental conditions on a neighborhood scale may be relevant. A plaintiff may live adjacent to a major freeway or industrial area or their home may have been built on an historic groundwater plume containing volatile contaminants that can seep into the home. It is helpful for attorneys to do brief research regarding the toxicant to easily identify some common household products and sources (including both anthropogenic and natural sources). The defense exposure scientist can also help identify potential key sources prior to the questioning of the plaintiff.

Finally, exposures to other chemicals, agents, and risk factors that may yield similar health effects should also be explored through questioning and incorporated into the exposure scientists dose analysis. Indeed, certain types of medical therapies, genetic factors, and family and social history should be asked about. The answers may reveal additional alternative causes of the specific disease plaintiff complains of.

Conclusion

Effective witness questioning strategies that incorporate the concepts of intensity, frequency, and duration, give the exposure scientist the foundation for building a defense based upon dose in toxic tort cases. Once the expert has this necessary information from the attorneys' questioning, s/he can review the product and scientific literature and apply modeling and surrogate principles to estimate the dose of toxicant from the defendant's product. The dose can then be used to calculate the plaintiff's ostensible risk of disease or health effect. The result of this process will assist the trier of fact in determining if the toxicant dose is a poison, inconsequential, or something in between.

Paul E. Benson is a shareholder with Michael Best & Friedrich LLP in Milwaukee. He is a trial lawyer who for over 30 years has specialized in class action, toxic tort, and product liability litigation, primarily in the defense of businesses and manufacturers. Mr. Benson has been a member of DRI since 1996.

Emily Goswami, CIH, is a certified industrial hygienist based in Exponent's Oakland, California, office. She has more than 15 years of professional experience in exposure assessment, industrial hygiene, human health risk assessment, and project management

Michael McCoy, CIH, DABT, is a toxicologist with Exponent based in Milwaukee. He has specific expertise in occupational and environmental exposure reconstruction, historical exposure assessment, and complex industrial hygiene evaluations.