TRACE BENZENE CASES IN THE REAL WORLD: IS A TRACE BENZENE CASE REALLY A BENZENE CASE

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Have you ever seen a "trace benzene product" or a "benzene containing product?" While many on the plaintiff's side of things may immediately and vigorously respond with a resounding yes, a careful defense lawyer will argue the fact that there are no such products. Instead, a defense lawyer should recognize that the alleged "trace benzene product" is instead a regular product, like xylene, toluene, or varsol, that is no different from any other product brought under scrutiny for allegedly causing injuries or damages.

Most lawyers know how to defend a products liability case. The product's manufacturer cannot be held liable if the product did not cause the plaintiff's alleged injuries or damages. How does one defend a lawsuit brought on the theory that a "trace benzene product" caused the plaintiff's alleged injury? More importantly, is a "trace benzene case" really a benzene case at all? Those are the questions this article seeks to answer.

I. What is Trace Benzene?

A product contains a trace amount of benzene if it contains a small amount of benzene, usually at levels from 0.001% to 2.0% Examples of products that contain a trace amount of benzene include xylene, toluene, Stoddard solvents, Varsol, paint thinner, paints, kerosene, oil and gasoline. Products that contain trace amounts of benzene often are distilled in the fractional distillation process used at oil refineries.

A good and experienced plaintiff's counsel will also avoid the use of the term "trace benzene" and instead will use the term "low level benzene containing product." If a defense lawyer falls into this trap then he will be playing the game on the plaintiff's home field.

II. What Types of Cases Involve Trace Benzene

A trace benzene case typically involves a plaintiff's claim that he or she was exposed to benzene at his or her place of work. The plaintiff's basic allegation is that his or her exposure to the trace amount of benzene contained in the defendant's product caused a serious or fatal medical condition. In his complaint, the plaintiff may allege he suffers from one of the following diseases because of his exposure to trace benzene contained in the defendant's product: acute myelogenous leukemia (AML); acute lymphocytic leukemia (ALL); chronic myelogenous leukemia (CML); chronic lymphocytic leukemia (CLL); acute undifferentiated leukemia (AUL); non-Hodgkin's lymphoma (NHL); multiple myeloma (MM); or myelodysplasia.

III. Is There Any Evidence that Trace Benzene Products Produce Sufficient Levels of Benzene Exposure to Cause any Health Effects?

In order to prove causation in a benzene case, a plaintiff must establish that he or she was exposed to benzene at sufficient levels for a period of time lengthy enough to cause any adverse health effects. In a trace benzene case, the plaintiff wants to make the same argument, namely, that exposure to the trace amounts of benzene contained in the product can cause adverse health effects. From the defense perspective, the question becomes whether the defense wants to fight that battle as the plaintiff has outlined it. Does a defense lawyer want to get drawn into a fight over whether the plaintiff's exposure to the trace amounts of benzene in the product at issue can cause adverse health effects? A defense lawyer can go down that path if he or she so chooses, but why choose that path when you can choose more favorable ground for your legal battle.

A. Trace Benzene Cases Must be Analyzed as Products Cases, not Benzene Cases.

1. The OSHA Standard

The United States Occupational Safety and Health Administration (OSHA) have established the standards for benzene exposure. These standards establish the exposure levels which employers must monitor for benzene. The OSHA standard for exposure to airborne benzene is 1 part per million (1 ppm). *See* 29 C.F.R. 1910.1028(c)(1). At an airborne concentration of 0.5 ppm or greater but less than 1 ppm, an employer must monitor each employee's benzene exposure at least every year. *See* 29 C.F.R. 1910.1028(e)(3)(i). OSHA has established the 0.5 ppm level as the "action level" for benzene. See 29 C.F.R. 1910.1028(b). For any employees exposed to benzene at levels above the action level for thirty (30) or more days a year, an employer must provide a medical surveillance program. For manufacturers, any products that contain benzene at levels of 0.1% or greater must provide labels and material safety data sheets that provide warnings regarding benzene.

2. What Level of Benzene Exposure Can be Generated by the Use of a Trace Benzene Product?

For benzene to have any ability to cause adverse health effects on a plaintiff, the plaintiff must be exposed to a sufficient concentration of benzene. After all, benzene, which is also found in the air we breathe and the food we consume, does not cause adverse health effects if the exposure level is insufficient. To that end, the plaintiff must prove the actual level of exposure or dose. A calculation of the dose of benzene that the plaintiff received is necessary to prove causation in a benzene case.

The calculation of the dose depends on several factors. Among those are:

- How is the trace benzene product being used?
- Where is the product used in the worksite?
- In what proximity is the employee to the location where the trace benzene product is used?

- Is the trace benzene product used indoors or outdoors?
- How often is the trace benzene product utilized at the worksite?
- How long is the trace benzene product utilized per day? Per week? Per year?

All of these factors play a role in determining the dose. In almost all cases, the dose will be calculated by the experts for both the plaintiff and defendant or defendants.

3. How is Dose Calculated?

The dose received by the plaintiff is calculated by multiplying the actual level of the concentration of the product in the air times the time period of exposure. Actual data from measurements should be used in calculating the dose.

The accurate calculation of the dose is important because it is a required element of proof for causation. Many states require plaintiffs to prove the dose, and, this is advantageous because plaintiffs often have little or no proof on the issue of dose. A plaintiff often will rely on their experts to establish a dose using estimates of benzene exposure levels that are much higher than the actual exposure at the plaintiff's workplace. This presents a defense lawyer with an opportunity to ask the expert some interesting questions.

For example, in any case involving a product containing a trace amount of benzene, 99.9% of the product at issue does not contain benzene. The benzene concentration in a trace benzene product is usually less than 0.1%. To reach the necessary benzene exposure level to have a dose sufficient to prove causation, the concentration of the product containing the trace amounts of benzene will often be estimated by plaintiffs' experts at extremely high levels. Accordingly, the remaining 99.9% of the product must also be present at such elevated concentrations as well. An analysis of those concentrations will often reveal levels of the product, not the benzene, but the product itself that quickly would cause neurotoxicity and death to any employees exposed to the product for any length of time. Furthermore, with concentrations of the product present at the workplace at the levels necessary to establish dose for the purposes of causation, any stray spark of static electricity would ignite an explosion inside the workplace

4. There is No Failure to Warn

In a lawsuit, a plaintiff will often include claims for failure to warn about the alleged benzene content in the product at issue. This claim typically has little merit, for the standards for warnings on products that contain benzene established by OSHA and ANSI only require warnings if the benzene content in the product is 0.1% or greater. Other than gasoline, most products at issue in a trace benzene case contain less than 0.1% benzene.

IV. Trace Benzene Case is Not a Benzene Case

As this article has explained, a trace benzene case is not a benzene case. It is instead a products case, and a lawyer defending a trace benzene case must keep that in mind as he prepares

the defense. The key is to always focus on the product that alleged by the plaintiff to contain benzene. A good defense lawyer will keep the focus solely on the product itself, and not on the trace amount benzene that the product may contain. In doing so, a good defense lawyer must not fall into the trap of using the language that the plaintiff's lawyer will use. The plaintiff's lawyer will attempt to shift the focus away from the product to the diminimus amount of benzene the product may contain.

For example, if a defense lawyer is confronted with a case in which the plaintiff alleges that exposure to xylene caused the plaintiff's acute myelogenous leukemia, the defense lawyer should keep the focus of the case on xylene and not benzene. Xylene contains less than 0.001% benzene. There are no medical articles that link exposure to xylene with acute myelogenous leukemia. As a product, xylene does not cause acute myelogenous leukemia. If exposure to xylene cannot cause acute myelogenous leukemia, it goes without saying that the small amount of benzene contained in xylene cannot cause acute myelogenous leukemia. Furthermore, the concentration of xylene needed to generate an exposure to benzene that is sufficient to have a statistical link to the causation of acute myelogenous leukemia is so great that the remainder of the xylene that does not contain benzene would put all the workers in the facility to sleep in minutes and cause death shortly afterwards.

Another product commonly targeted by plaintiffs is toluene. As a product, toluene contains less than 0.001% benzene. Toluene also inhibits hematological toxicity. The scientific and medical literature on toluene does not support a claim that toluene causes acute myelogenous leukemia or any other type of leukemia. This is why gasoline, which can contain toluene and benzene, is not classified as a human carcinogen by IARC, the EPA, and the National Toxicological Program.

V. Conclusion

Just like you are not exposed to a "salt-containing product" when you have your morning toast, a plaintiff in a trace benzene case is not exposed to a benzene-containing product. Instead, the plaintiff is exposed to a product such as xylene or toluene. The case must be defended with that in mind. A good defense lawyer will focus on the product and the product's toxicity and not allow the plaintiff's lawyer to shift the focus to the small amount of benzene contained in the product. No such thing as a trace benzene case exists. In actuality, the inaptly named trace benzene case is truly a products liability case. A defense lawyer should help keep this in mind in order to prevail.