CASE NO. 09-4572

IN THE
UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

SUE PLUCK, et al.
Plaintiffs-Appellants

v.

BP Oil Pipeline Company
Defendant-Appellee

On Appeal from the United States District Court
for the Northern District of Ohio
Eastern Division
Case No. 5:08cv1545

PRINCIPAL BRIEF OF APPELLANTS SUE AND RAY PLUCK

Oral argument requested

JACK MORRISON, JR. (#0014939)
THOMAS R. HOULIHAN(#0070067)
AMER CUNNINGHAM CO., L.P.A.
1100 Key Building
159 South Main Street
Akron, OH 44308
Phone: 330-762-2411
Fax: 330-762-9918
Counsel for Appellants Sue and Ray Pluck

Table of Contents

Table of Authorities

Cases

Statutes

Rules

Other Authority

Statement in Support of Oral Argument

Pursuant to Fed. R. App. Proc. 34 and 6. Cir. R. 34, Appellants respectfully request that oral arguments be heard in this case. Due to the nature of the issues presented, Appellants believe that oral argument will significantly aid the Court's decisional process by allowing counsel the opportunity to answer the Court's questions and further clarify the issues presented in this brief.

Statement of Subject Matter and Appellate Jurisdiction

This suit was pursued in the U.S. District Court under removal and diversity jurisdiction. 29 U.S.C. § 1446; 28 U.S.C. § 1332. The trial court granted summary judgment to BP Oil Pipeline Company on November 25, 2009, with an opinion and Judgment Entry filed the same day. (R. 70, 71). Sue and Ray Pluck filed their notice of appeal on December 21, 2009 (R. 72), within the applicable 30 day deadline. Fed.R.Civ.P.4.

Statement of Issues for Review

I. Whether the District Court ignored evidence of Sue Pluck's exposure to benzene in her drinking water?

II. Whether in a toxic tort case, a precise dose reconstruction must be made as a precursor to a specific causation opinion, or is an opinion grounded in differential diagnosis an acceptable alternative means of proving specific causation?

III. When an opponent attacks an expert's methodology, is the expert precluded from providing specific information about his methodology by way of Declaration, or must the expert anticipate all potential criticism of his methodology in his expert report?

Statement of the Case

This matter arose from a toxic tort in Ohio, where Sue and Ray Pluck claimed injury due to the presence of benzene and other carcinogens in their aquifer, following pipeline leaks. The suit was originally filed in state court, and was removed pursuant to 29 U.S.C. § 1446(b) by BP Oil Pipeline Company. The matter was assigned case number 5:06-cv-1444 in the District Court. The first suit was voluntarily dismissed, then refiled. The Plucks refiled the case both in the Ohio state courts and in the U.S. District Court on the basis of diversity jurisdiction, under 28 U.S.C. § 1332. The refiled state court case was removed and consolidated with the Federal claim under case number 5:08-cv-1707.

The case progressed through discovery, and BP filed a Motion for Summary Judgment (R.40), along with two motions seeking to exclude the Plucks' experts on general and specific causation. (R. 41, 42). The Plucks responded to these motions. (R. 52-54). On November 25, 2009, the trial court entered a decision on these motions, excluding the Plucks' specific causation testimony and granting summary judgment to BP. (R. 70). The Plucks timely filed a notice of appeal.

Statement of Facts

A. Benzene is a known human carcinogen

Benzene is a component of gasoline, and is a class I human carcinogen according to International Agency on Cancer (IARC), the United States Environmental Protection Agency, OSHA, the National Toxicology Program, American Conference of Governmental Hygienists and many other agencies. The American Petroleum Institute Toxicology Committee in 1948 issued a statement finding that "it is doubtful whether any concentration of benzene greater than zero is safe over a long period of time." American Petroleum Institute Toxicology Committee, *Toxicological Review-Benzene*, September, 1948, (Exhibit 1 to Brief in Opposition to Motion for Summary Judgment, R. 52). Dr. Deborah Glass, in her 2003 study examining the leukemia risk associated with low level benzene exposure, found that "[n]o evidence was found of a threshold cumulative exposure below which there was no risk." Glass, D. et.al. *Leukemia Risk Associated with Low-Level Benzene Exposure.* Epidemology 2003;14:569-577 (Exhibit 2 to Brief in Opposition to Motion for Summary Judgment, R. 52). More recently, Dr. Myron Mehlman concluded that there is no safe level of exposure to benzene above zero that can protect humans from the carcinogenic effects of benzene. Mehlman, M. *Benzene, a multi-organ carcinogen.* Ear. J.Oncol., 13(1), 7-19, 2008 (Exhibit 3 to Brief in Opposition to Motion for Summary Judgment, R. 52).

B. Benzene causes non-Hodgkin's lymphoma.

Even BP's experts have been forced to admit that studies exist which report a statistically significant association between benzene and non-Hodgkin's lymphoma in humans. (Deposition of David Garabrant, M.D., R. 47, page 72-74; Deposition of Debora Gray, Ph.D., R. 44, page 75-76, 87). In 2007, Martyn Smith and others reviewed all prior case-control and cohort studies into the connection between benzene and non-Hodgkin's lymphoma. Smith M. T., Jones, R. M., Smith, A. H. *Benzene Exposure and Risk of Non-Hodgkin Lymphoma* . Cancer Epidemiol Biomarkers Prev., 16(3):385-391, 2007 (Exhibit 4 to Brief in Opposition to Motion for Summary Judgment, R. 52). The authors identified 43 case-control studies of persons with occupational exposure to benzene, and 40 out of the 43 studies (93%) showed elevation of NHL risk. Other recent studies have led to the same conclusions. See Steinmaus, C., et al, *Meta-analysis of Benzene Exposure and Non-Hodgkin Lymphoma: biases could mask an important association.* Occupational and Environmental Medicine, 65:371-378, 2008. (Exhibit 5 to Brief in Opposition to Motion for Summary Judgment, R. 52, noting "[t]he finding of elevated relative risks in studies of both benzene exposure and refinery work provides further evidence that benzene exposure causes NHL"); Wang R., et al., *Occupational exposure to solvents and risk of non-Hodgkin lymphoma in Connecticut women.* Am J Epidemiol. 2009 Jan 15:169(2):176-185,

2009. (Exhibit 6 to Brief in Opposition to Motion for Summary Judgment, R. 52, noting "our results are consistent with an association between benzene exposure and risk of NHL").

C. BP's predecessor spilled benzene-containing petroleum products from its pipeline near the Pluck's former home.

The historical fact that BP's predecessor spilled petroleum products from its pipeline is well documented. In November, 2007, the Director of the Ohio EPA issued his Amended Final Findings and Orders, attached to Plaintiff's Brief in Opposition to Motion for Summary Judgment, R. 52, as Exhibit 7. Therein, at paragraph 5, the EPA found that BP's predecessor operated a 6 inch pipeline passing through Franklin Township in Summit County, Ohio, from the early 1900's until 1970. Id. at ¶ 5b,e. The pipeline transported both refined and unrefined petroleum products, all of which contained BTEX, an acronym for the chemicals Benzene, Toluene, Ethyl Benzene and Xylene, which are volatile hydrocarbons. Id. at ¶ 5b.

There were at least 5 documented spills and releases of gasoline from the 6 inch pipe when it was in operation. Id. at ¶ 5l,m. These releases occurred in what is commonly known as the "Weaver Woodlands" development, and the homes therein obtain drinking water from wells.

In 1990, a Weaver Woodlands resident called the EPA complaining of a gasoline odor and taste within her and her neighbors' wells. Id. at ¶ 5p. The EPA

investigated, and found some residents along Maywood Drive, Dailey Road, Kaylin Drive, and Fairwood Drive had water wells contaminated with BTEX chemicals. The EPA staff could smell a gasoline odor from the water wells, and in the basements, of several homes. Id. at ¶ 5q. The EPA did water well testing, and found that the wells of nine residences contained benzene in concentrations that exceed the EPA's safe drinking water standards. Id. at ¶ 5r. The EPA investigation documented soil and groundwater contamination in several "areas of concern" throughout the Weaver Woodlands allotment. The property at 605 Fairwood Drive was contained in "Area of Concern 2," had documented soil contamination to its south and to its northeast, and had documented groundwater contamination.

D. BP bought a number of homes and began remediation.

In 1995, the former owners of the property at 605 Fairwood, Willard and Sylvia Facemire, sued BP for contaminating their property. Willard Facemire, et al. v. BP America, Inc., et al., Summit County Common Pleas Case No. CV-1995-01-0159. In settlement, BP purchased the 605 Fairwood property, along with a number of others in the neighborhood. BP also began remediation efforts, including excavation of affected soil, extraction of soil vapors and groundwater, and the placement of monitoring wells. Id. at ¶ 5qq-ccc. However, as to AC-2, BP

adopted a monitoring-only strategy. Id. at ¶ 5tt. BP tested the benzene level in wells, but did not test the air quality.

Attempts were made to remediate the aquifer in AC1, 3, 4, and 6 but those efforts were shut down in 2004 (Martin Schmidt Depo., R. 45, R. 45, pages 55-57). The remediation efforts in AC1, 3, 4, and 6 were shut down because the efforts were not effective (Schmidt Depo., R. 45, R. 45, page 56).

E. BP sold 605 Fairwood to the Plucks.

Despite the fact that there had been some benzene detected in the well at 605 Fairwood during the EPA investigation, and despite the fact that a monitoring well just north of the property was recording elevated benzene levels in 1994, in May of 1996, BP sold 605 Fairwood to Sue Pluck. (Deposition of Patrick Agostino, Ph.D., R. 48, page 99; Sue Pluck Depo., R. 55, page 52). To conduct the sale, BP employed realtor Lois Kuntzleman. (Sue Pluck Depo., R. 55, page 53). At the time Lois Kuntzleman and Sue Pluck signed the papers, Lois told her that there had been an oil problem in the area that had been all cleaned up, and the chances of anything happening with their well would be about the same as the chances of winning the lottery. (Sue Pluck Depo., R. 55, page 53-54). Sharon Chitty, on behalf of BP, told Sue Pluck that the property had no contamination, had never been contaminated and that the clean up was over. (Sue Pluck Depo., R. 55, page 56). Around the time of purchase, Sue was given a publication by BP which

indicated that the well for 605 Fairwood had been tested and found to be free of hydrocarbon contamination. (Sue Pluck Depo., R. 55, page 83). Sue was further told that BP would stand behind all of these houses as part of BP's "home buyer protection program" to guarantee their worth and that there would be no problems (Sue Pluck Depo., R. 55, page 56).

BP continued with its water monitoring strategy, testing the Pluck's well periodically. In November of 1996, the well tested positive for benzene. BP representatives told Sue that the elevated test was nothing to be concerned about. (Sue Pluck Depo., R. 55, page 19). Sharon Chitty and Frank Marsek of BP discussed the positive test with Sue Pluck, and told her they would dig a deeper well. (Sue Pluck Depo., R. 55, page 20). They did dig a deeper well for the Plucks in December of 1996. (Sue Pluck Depo., R. 55, page 20). Initially, there were no problems with the new, deeper well.

While living at 605 Fairwood, Sue Pluck used the water. She would drink 8-12 eight ounce glasses of water per day and 2 or 3 regular cups of coffee a day at her home. (Sue Pluck Depo., R. 55, page 97). She also took at least one shower a day, sometimes twice a day, and she enjoyed taking very hot showers for 10-15 minutes at a time. (Sue Pluck Depo., R. 55, page 137-138). Sue had a garden for several years where she would grow green peppers, tomatoes, beans, cucumbers, onions and corn. (Sue Pluck Depo., R. 55, page 72). The garden and the yard were

watered with water straight from the well, which did not pass through a water softener or any kind of filtration. (Sue Pluck Depo., R. 55, page 74; Ray Pluck Depo., R. 56, page 12). Sue stopped gardening in about 2001 because she raised a crop of vegetables that were mangled and convoluted and looked too gross to eat. (Sue Pluck Depo., R. 55, page 73).

From time to time, Sue and Ray would smell a gasoline odor in and around the house. Sue recalled several times smelling unexplained gasoline odors outside of her home. (Sue Pluck Depo., R. 55, page 95-96). Ray occasionally detected an odor to the water from the well when the irrigation system would water the yard. (Ray Pluck Depo., R. 56, pages 12, 16-17). Further, Sue recalled several times when the water in the house smelled like gasoline. (Sue Pluck Depo., R. 55, page 78). Ray also detected a gasoline smell from the kitchen sink and the basement sink 5 or 6 times. (Ray Pluck Depo., R. 56, page 12-14).

The first time the water smelled of gasoline was in 1996, around the time the shallow well tested positive for benzene. (Sue Pluck Depo., R. 55, page 88). When that happened, Sue switched to drinking bottled water. (Sue Pluck Depo., R. 55, page 91-92). When the new, deeper well was drilled in December 1996, **Sue went back to drinking tap water.** (Sue Pluck Depo., R. 55, page 91-92). After the second positive test in 2003, Sue switched back to bottled water until her husband installed a reverse osmosis system which served drinking water to a tap in

the kitchen. (Sue Pluck Depo., R. 55, page 94). Sue Pluck stayed in the house, using this water, **for nine years**, until 2005.

F. The "lower aquifer" tests bad, too.

In December of 1996, BP drilled a new, deeper well for the Plucks to a depth of 155 feet. (Agostino Depo., R. 48, p. 81). BP's decision to drill the Plucks a deeper well was apparently born of BP's belief that there was a deeper aquifer that was untainted by contamination. However, that did not turn out to be the case, and BP knew it by at least 1998.

In 1998, after some remediation efforts, BP attempted to find a drinking water supply for 604 Fairwood, a home across the street from the Plucks that BP also bought. On October 18, 1998, BP drilled a new well to a depth of 240 feet at 604 Fairwood. (Agostino Depo., R. 48, p. 82). Upon completion, it was tested, and immediately yielded a reading of 3.6 parts per billion of benzene. (Agostino Depo., R. 48, p. 82). This was immediately south of the Pluck property, at an even lower depth than the Pluck's well, with groundwater that flowed to the north. Nobody told the Plucks of this result.

G. Monitoring continues

Instead of warning the Plucks about the result at 604 Fairwood, or even increasing the frequency of the testing of the Pluck's well, BP continued the same monitoring program. Between the time of the drilling of the new well in December

of 1996 and the time that Sue Pluck began to exhibit symptoms of lymphoma, the well was tested quarterly, and no detectable levels of benzene were found in those tests.

However, the absence of detectable benzene four times per year does not mean that it was not there each of the 361 other days. Patrick Agostino, Ph.D., Plaintiffs' expert hydrogeologist, testified that taking samples of a domestic water well 4, 5, or 6 times a year does not tell him what the occupants are drinking or showering with every other day during the year (Agostino Depo., R. 48, page 36). The rate of contaminant pumped from a well is variable, and the concentration of a contaminant can fluctuate in reaction to recharge from rain and other sources, as well as the amount of pump draw-down. (Agostino Depo., R. 48, pages 88-90). In Agostino's estimation, if BP really wanted to know how much benzene was coming through the Pluck's well, they could have tested daily. (Agostino Depo., R. 48, page 35).

Further, there were problems with the testing methodology. BP would take a sample of the water, and it would sit for 8-20 days before it was tested by a lab. (Deposition of Joseph Landolph, Ph.D., R. 49, page 186; Deposition of James Dahlgren, M.D., R. 51, page 33). Benzene is an extremely volatile chemical, and it will evaporate into the atmosphere quickly. (Landolph Depo., R. 49, page 186; Agostino Depo., R. 48, page 119). As a result, there may have been detectable

benzene in the samples which became undetectable due to the testing delays. (Landolph Depo., R. 49, page 186; Dahlgren Depo., R. 46, page 33). Dr. Dahlgren has done laboratory studies where he placed Benzene in blood and over the course of four days the Benzene evaporated by 50%. (Dahlgren Depo., R. 46, page 33). If BP really wanted to know the amount of benzene in the water, it should have tested the water immediately. (Landolph Depo., R. 49, page 207-208).

It is clear that detectable levels of benzene were found in 1996 and from 2003-2005. Further, as detailed above, Sue and Ray Pluck smelled odors similar to gasoline on several occasions. The odor threshold for benzene is 50 parts per million, which is a thousand times more than the EPA's maximum contaminant level for drinking water. (Dahlgren Depo., R. 46, page 39, 43; Landolph Depo., R. 49, p. 148-149).

Finally, even if the benzene levels were truly below detectable amounts, it doesn't mean that the benzene levels in Sue Pluck's water were safe. Both Landolph and Dahlgren testified that benzene is such a potent carcinogen that there is no truly "safe" level of exposure, because it there is no threshold below which benzene does not obey the dose-response curve. (Dahlgren Depo., R. 46, page 32; Landolph Depo., R. 49, p. 150). The fact that BP did testing that resulted in no detectable benzene is certainly not a basis to exclude specific causation testimony. See Kerner v. Terminix Int'l, Co., No. 2:04-CV-735, 2008 WL 341363, at *4–6

(S.D. Ohio Feb 6, 2008) (defendant's non-detect test results go to weight, not admissibility, of expert opinion.)

H. Sue Pluck gets ill

Sue Pluck was exposed to benzene for five years before she began to get ill. Ray remembers Sue suffering night sweats and fevers in 2001 (Ray Pluck Depo., R. 56, page 33). Prior to her diagnosis of lymphoma in 2002, Sue Pluck went to a couple of doctors who diagnosed her fevers as being a result of the EBV virus or other infections such as bronchitis or pneumonia. (Sue Pluck Depo., R. 55, page 69-70). Sue was eventually diagnosed with lymphoma in 2002. (Sue Pluck Depo., R. 55, page 63).

Following Sue's diagnosis, detectable levels of benzene in the Pluck's well were reported. Beginning in October of 2003, the raw water benzene results from the Pluck's well have been above the 1.0 part per billion detection level, reaching as high as 6.6 parts per billion. (Exhibit 3 to Agostino Depo., R. 48) As she received these test results, Sue would call Sharon Chitty who told her that the levels were below the levels of any danger. (Sue Pluck Depo., R. 55, page 61). Finally, in 2005, Sue mentioned to her physician that she had a benzene problem in her well, and the physician told her to get out of the house. (Sue Pluck Depo., R. 55, page 64). That was the first point that Sue made a connection in her mind between benzene and the cancer. (Sue Pluck Depo., R. 55, page 64).

Summary of Argument

The District Court ignored evidence of Sue Pluck's extensive exposure to benzene in her water supply, which was admittedly present in her aquifer due to leaks from a BP pipeline. Although the amount of benzene ingested by Sue Pluck cannot be precisely quantified, she drank the water, cooked with the water, bathed with the water, and used the water for nine years, before a doctor informed her that benzene was associated with cancer. Those facts were a sufficient foundation for a physician, Dr. James Dahlgren, to include benzene exposure in a differential diagnosis of the cause of Sue Pluck's cancer.

The trial court further erred in determining that a precise dose reconstruction is an absolute precursor to specific causation testimony. This Court has rejected that premise more than once.

Finally, the District Court erred in striking Dr. Dahlgren's Declaration as being in conflict with prior testimony. Dr. Dahlgren implicitly used causal reasoning and differential diagnosis in his expert report, and fairly gave BP notice of his opinions. In his deposition, BP did not ask Dr. Dahlgren what methodology he utilized. When BP then attacked Dr. Dahlgren's methodology, he provided a Declaration explicitly stating the methodology that was implicit from a fair reading of his report. This was not improper, and the trial court erred in concluding it was.

Standard of Review

The Circuit Court reviews a District Court's grant of summary judgment de novo. Am. Civil Liberties Union of Ky. v. Grayson County, Ky., 591 F.3d 837, 843 (6th Cir. 2010). This requires construing the evidence and drawing all reasonable inferences in favor of the Plucks, as the nonmoving party. Id. As for the District Court's exclusion of expert testimony as part of the summary judgment analysis, that decision is reviewed under an abuse of discretion standard. Meridia Prods. Liab. Litig. v. Abbott Labs., 447 F.3d 861, 868 (6th Cir. 2006). An abuse of discretion exists when a district court "bases its ruling on an erroneous view of the law or a clearly erroneous assessment of the evidence." Brown v. Raymond Corp., 432 F.3d 640, 647 (6th Cir.2005).

Argument

I. The District Court erred by ignoring evidence of Sue Pluck's exposure to benzene in the well water.

At page 2, and again at page 10, footnote 2, the Court recites its conclusion that Sue Pluck stopped drinking well water after smelling the odor of gasoline in the water on one occasion. This conclusion is not supported by the record. The evidence was clear that, while living at 605 Fairwood, Sue Pluck drank large amounts of well water.

As detailed above, Sue would drink 8-12 eight ounce glasses of water per day and 2 or 3 regular cups of coffee a day at her home. (Sue Pluck Depo., R. 55, page 97). The first time the water smelled of gasoline was in 1996, around the time the shallow well tested positive for benzene. (Sue Pluck Depo., R. 55, page 88). For a few months, Sue switched to drinking bottled water. (Sue Pluck Depo., R. 55, page 91-92). When the new, deeper well was drilled in December 1996, Sue went back to drinking well water. (Sue Pluck Depo., R. 55, page 91-92). She kept drinking well water for the next several years. (Sue Pluck Depo., R. 55, page 93-94).

Accordingly, the District Court's implication that Sue Pluck switched to bottled water in 1996 after smelling gasoline on one occasion was not supported by the evidence. The District Court also ignored the other avenues of exposure to benzene in the water – through dermal absorption and inhalation through

showering, and through working the soil in her garden, which was watered from the well. (Sue Pluck Depo., R. 55, pages 72-74, 137-138).

The trial court also selectively noted evidence of the presence of benzene in the aquifer. The only fact recited by the District court is BP's well water test results, which purported no detectable levels of benzene from 1996-2003 (District Court Decision, R. 70, p. 2). The trial court ignored the significant problems with those test results. As detailed above, the water table within an aquifer fluctuates significantly, and the fact that there was no detectable benzene on four days per year does not suggest that the aquifer was benzene-free on the other 361 days.

Further, BP's test methodology, which allowed sampled water to sit for 8-20 days before it was tested by a lab, was seriously flawed. (Landolph Depo., R. 49, page 186; Dahlgren Depo., R. 46, page 33). The fact that the Plucks smelled a gasoline odor from the water on several occasions indicates that benzene was in the water – the odor threshold for benzene is 50 parts per million, which is a thousand times more than the EPA's maximum contaminant level for drinking water. (Dahlgren Depo., R. 46, page 39, 43; Landolph Depo., R. 49 p. 148-149).

The trial court further ignored the admissions by Martin Schmidt, Ph.D., a hydrogeologist retained by BP to monitor the aquifer remediation projects in that area. (Schmidt Depo., R. 45, page 32). Despite the periodic test results at the Pluck's well, Schmidt admitted that benzene is still in the aquifer and he agrees

that benzene is still in the soil of the Weaver Woodlands allotment. (Schmidt Depo., R. 45, pages 37, 46, 91). Schmidt admitted that the water from the aquifer is not safe to drink without some form of water treatment. (Schmidt Depo., R. 45, pages 91-92).

All of this information was omitted in the trial court's analysis, and the omission of this information painted a picture that the Plucks brought this lawsuit over an isolated incident where Sue Pluck smelled gasoline from her water in 1996, and switched the bottled water. As set forth above, Sue Pluck drank, cooked with, showered in, and used water that BP's remediation expert admits was not safe to drink, every day, for nine years. The trial court's omission of these facts tainted the remainder of the trial court's analysis.

II. The District Court erred in excluding the specific causation testimony of Dr. Dahlgren.

A. Dr. Dahlgren was a competent expert witness with appropriate methodology.

Dr. Dahlgren issued an expert report in this matter in October of 2006, long before discovery took place. (Expert Report, attached as Exhibit 2 to Declaration of Dr. Dahlgren, R. 51). An expert report is not required to "replicate every word that the expert might say" at trial, but rather to "convey the substance of the expert's opinion . . . so that the opponent will be ready to rebut, to cross-examine,

and to offer a competing expert if necessary." Walsh v. Chez, 583 F.3d 990, 994 (7th Cir. 2009).

In his expert report, Dr. Dahlgren set forth the foundational information he considered and the assumptions he made. Dr. Dahlgren reviewed Sue Pluck's medical records, and he reviewed an EPA report concerning the contamination. (Expert Report, attached as Exhibit 2 to Declaration of Dr. Dahlgren, R. 51, p. 1, 20). Dr. Dahlgren acknowledged that his information about Sue Pluck's exposure was limited, but that from what he had seen, Sue Pluck "probably had an injurious exposure to benzene and other organic solvents considerably above background." (Expert Report, attached as Exhibit 2 to Declaration of Dr. Dahlgren, R. 51, p. 20). He stated that he expected to link Sue's cancer to her exposure to benzene in the water "if the significant exposure is confirmed."

While Dr. Dahlgren did not expressly set forth his methodology in the report, the report clearly met the purpose of allowing BP to prepare for his eventual testimony. Dr. Dahlgren went through the process of causal reasoning, as physicians do. The fact that Dr. Dahlgren did not use the term "differential diagnosis" in his report does not mean that he did not use a proper process - as noted in the Reference Manual on Scientific Evidence, 467 (2d ed.2000), "this kind of reasoning is rarely made explicit."

The parties then engaged in discovery, and facts supporting Sue Pluck's significant exposure to benzene were developed, as detailed above. Dr. Dahlgren was given additional exposure data, including BP's measurements of benzene in the water. (Dahlgren Depo., R. 46, page 17 - 18). Dr. Dahlgren was deposed by BP, and **was never asked what methodology he used**. (Dahlgren Depo., R. 46). He was never expressly asked what foundational material he considered. (Dahlgren Depo., R. 46). In preparation for the deposition, Dr. Dahlgren did a rough calculation of the dose that Sue Pluck as an example of what dose she may have received on one of the occasions when a gasoline odor could be smelled from the water. (Dahlgren Depo., R. 46 at pages 31-35). But Dr. Dahlgren never said that this calculation was the methodology he utilized to reach his ultimate opinion about how **nine years of exposure** affected Sue Pluck. It was but one element of support.

In his Deposition, Dr. Dahlgren did the work of differential diagnosis without necessarily using the term "differential diagnosis." He identified the risk factors for NHL, including benzene and other causes. (Dahlgren Depo., R. 46, page 22). He ruled out Epstein-Barr Virus due to a lack of a reported association between the virus and NHL. (Dahlgren Depo., R. 46, page 23). With respect to cigarette smoking, Dr. Dahlgren testified that there has been no association noted between cigarette smoking and Non-Hodgkin's lymphoma in medical literature

and that cigarette smoke contains relatively little benzene, around the amount found in ambient air. (Dahlgren Depo., R. 46, pages 25-29). As to a genetic susceptibility, Dr. Dahlgren ruled that out because genetic susceptibility alone would not cause Non-Hodgkin's lymphoma without the environmental trigger of benzene. (Dahlgren Depo., R. 46, page 24). On balance, Dr. Dahlgren believed that Mrs. Pluck's illness was caused by her exposure to benzene because that risk was a much larger contributor than any of the other factors. (Dahlgren Depo., R. 46, pages 55-56). Further, the latency period between exposure and the development of Non-Hodgkin's lymphoma can be as short as 3-5 years, which matches Sue Pluck's development in this case. (Dahlgren Depo., R. 46, pages 74-76).

Even though BP never asked Dr. Dahlgren what methodology he employed in reaching his opinion, BP filed a Motion in Limine attacking BP's formulation of his methodology, claiming that the rough dose calculation that he performed was not adequate to support his testimony. (R. 41). In response, Dr. Dahlgren executed his Declaration (R. 51), which specifically identified differential diagnosis as his methodology. In that Declaration, Dr. Dahlgren explains what he reviewed at the time he wrote the report, what information he received and evaluated prior to the deposition, and what process he used. (Declaration, R. 51,

¶5-11). Had be been asked in his deposition, he could have expressed the same things. But he wasn't asked.

Dr. Dahlgren also set forth further detail about the rough dose calculation he did before the deposition. (Dahlgren Declaration, R. 51, ¶11-18). The trial court found that this portion of the Declaration contradicted his prior testimony. (District Court Decision, R. 70, p. 12). Even if that were true (which is disputed below), any contradiction in the dose calculation does not disturb the independent methodology which supports Dr. Dahlgren's opinion – differential diagnosis.

That differential diagnosis analysis was explored in Dr. Dahlgren's Deposition, and was not affected by the Declaration. It stands as an independent methodology, supporting Dr. Dahlgren's opinion. This court has held that differential diagnosis is "an appropriate method for making a determination of causation for an individual instance of disease." Best v. Lowe's Home Ctrs., Inc., 563 F.3d 171, 178 (6th Cir. 2009). Accordingly, Dr. Dahlgren's testimony is competent to demonstrate specific causation.

B. The District Court erred in demanding dose quantification.

The District Court, at pages 5 to 6 of its Decision, R. 70, adopted a rule that requires a plaintiff in a toxic tort case to quantify a dose of the toxic agent he or she was exposed to in order to support any specific causation opinion. The rule adopted by the trial court essentially makes any toxic tort cases unwinnable. Few,

if any, plaintiffs will have particularized, quantified exposure data to toxic substances. If a person is aware enough of exposure to test for the toxic substance, he or she will remove themselves from exposure. Conversely, if one is unaware of the toxic substance, then he or she will not have test data.

The Reference Manual on Scientific Evidence, 2d contains separate chapters applicable to epidemiological testimony, toxicological testimony, and medical testimony. The District Court's error in utilizing the Manual was applying concepts of epidemiology and toxicology as a bar to medical testimony. At page 5 of its decision, the District Court cites to the Manual at page 396 for a definition of specific causation. This is from the Manual's chapter on epidemiology. On page 6, the District Court cites to the Manual at page 422-423 for the specific causation standard applicable to toxicologists, which is premised upon a showing of a dose-response curve. This is from the Manual's chapter on toxicology.

While that may be the standard applicable to a toxicologist offering a specific causation opinion, it is not the standard applicable to physicians, such as Dr. Dahlgren. The Manual also has a chapter on medical testimony, which is what the District Court should have looked to. The Manual recognizes and permits that physicians will engage in medical reasoning to offer causation opinions.

The Manual allows physicians to "rely on their training and expertise as clinicians" to determine causality. Federal Judicial Center, *Reference Manual on*

Scientific Evidence, 470 (2d ed.2000). The Manual acknowledges that "[d]efinitive tests for causality are actually rare, and physicians must almost always use an element of judgment in determining the relationship between exposure and disease in a given patient." Id. The tools that a physician uses to determine causation from exposure to a substance are "causal and probabilistic reasoning" in a manner "analogous to methods used for assessment of internal disease causation." Id. at 471.

The District Court, in demanding a precise dose calculation as support for Dr. Dahlgren's opinions, ignored the role a physician's clinical judgment and inference plays in the process. In reviewing a patient's exposure to a toxic substance, the Manual recognizes that physicans may use "clinical inference" to develop an opinion of exposure. Id. at 472. The Manual expressly recognizes that it may be impossible to quantify a dose in all toxic exposure cases: "In many instances, **the desired information will be incomplete**, but it can often be **inferred** from the literature that a given amount of time [of potential exposure] is well associated with disease-producing potential." Id. (emphasis added).

While the Manual recognizes that the toxicological dose-response rule is an important consideration for medical testimony, it is not the end-all be-all of the analysis. In the clinical world in which physicians operate, "there are some instances in which the general rule does not hold." Id. at 475. Instead, the

physician must use his or her knowledge, training and experience integrate all of the factors he or she is presented with to make a clinical judgment. Id. A physician's process in reaching an opinion on causality "cannot be reduced to mathematical formulas." Id. This is because "[t]here are inevitable gaps in information" outside the laboratory. Id. As a result, "clinical judgment is critical to opinions on diagnosis and causation for the individual patient. …" Id.

The District Court insisted that that the only proper methodology for determining specific causation in this action was the precise calculation of Sue Pluck's dose. Such a rule would make every toxic tort case unwinnable, for as the Manual recognizes, there are gaps in information in every case. The District Court's rule ignores the ability of a physician to apply causal and probabilistic reasoning to arrive at a differential diagnosis and offer an opinion on specific causation. The District Court's opinion flies in the face of both the Manual and Sixth Circuit precedent.

In Hardyman v. Norfolk & Western Railway Co. 243 F.3d 255 (6th Cir., 2001), a physician sought to offer a specific causation opinion that a railroad brakeman developed carpal tunnel syndrome as a result of operating train brakes. The physician arrived at this conclusion using differential diagnosis. Id. at 262. The district court excluded this opinion, holding that the physician must demonstrate a known "dose/response relationship" which would establish a

threshold for injury, backed by epidemiological studies. Id. This Court reversed, finding that dose and response evidence was unnecessary, and finding that the physician's differential diagnosis, based upon the physician's skill, experience, and training, was sufficient specific causation testimony. Id. at 265.

In reaching that result in Hardyman, this Court noted the realities of toxic tort cases – quantification of exposure is rarely achieved. The Court, quoting Westberry v. Gislaved Gummi AB, 178 F.3d 257, 264 (4th Cir.1999), stated:

> [W]hile precise information concerning the exposure necessary to cause specific harm to humans and exact details pertaining to the plaintiff's exposure are beneficial, **such evidence is not always available, or necessary**, to demonstrate that a substance is toxic to humans given substantial exposure and need not invariably provide the basis for an expert's opinion on causation. Hardyman at p. 265-266. (6th Cir. 2001).

Recently, in Best, supra, a plaintiff alleged to have lost his sense of smell after being doused with a pool cleaning chemical at a retail store. The plaintiff presented a physician to offer specific causation testimony, that the particular chemical caused the plaintiff's injury. As in this case, the district court excluded the physician's opinion and granted summary judgment against the plaintiff. This Court found an abuse of discretion in the exclusion of the physician's testimony.

In Best, the district court faulted the physician for relying upon the plaintiff's explanation of the accident, and upon generalized information such as the Material Safety Data Sheet for the pool chemical. Id. at 177. The trial court also criticized

the physician for relying upon information gained from the experiences of other patients he treated, and for extrapolating the known effects of the pool chemical. Id. at 177. Ultimately, the district court held that the physician's opinions were speculative.

This Court found that the district court "did not recognize that differential diagnosis is a valid technique that often underlies reliable medical-causation testimony," and as a result, did not afford the district court's determination the deference it would otherwise have. Id. at 178. Citing to In re Paoli Railroad Yard PCB Litigation, 35 F.3d 717 (3d Cir. 1994), this Court recognized that a differential diagnosis process whereby a physician may first ascertain the nature of the injury, "rule in" potential causes, then "rule out" other causes using standard diagnostic techniques, in order to reach a conclusion. Best at 179. This Court also noted that "[t]he steps a doctor has to take to make a differential diagnosis reliable are likely to vary from case to case." Id. quoting In re Paoli, internal quotations omitted. Best clearly allows for a physician to exercise causal reasoning in conformance with the Manual on Scientific Evidence as a proper methodology supporting a specific causation opinion.

The District Court rejected the principal of Hardyman and Best – that specific causation testimony can be founded upon clinical judgment as opposed to the mathematical calculation involved in applying the dose-response curve.

Instead, it adopted a rule that, in any toxic tort case, a specific dose must be calculated. (Decision, R. 70, p. 5-6). In reaching this conclusion the District Court relied principally on three cases: Nelson v. Tenn. Gas Pipeline Co., 243 F.3d 244 (6th Cir. 2001), Valentine v. PPG Indus., Inc., 158 Ohio App. 3d 615, 821 N.E.2d 580 (2004) and Adams v. Cooper Indus., Inc., No. 03-476-JBC, 2007 WL 2219212 (E.D. Ky. Jul. 30, 2007).

In Nelson, this Court upheld the exclusion of specific causation testimony when there was no dose calculated. Nelson at 252-253. However, in Nelson, this Court was careful to point out that the absence of a dose calculation was fatal to the specific causation testimony because there was no "factual basis from which a jury could infer that the plaintiffs were in fact exposed to [toxins] from [the alleged source]." Id. In contrast, in the present case, there was evidence of Sue Pluck's exposure to benzene through the aquifer. There is no dispute that there is benzene in the aquifer and that BP's pipeline was the source. Sue drank water for years that BP's own remediation expert stated was unfit for human consumption. She showered, cooked with, and gardened with the water. She and her husband smelled gasoline odors from time-to-time. The water tested positive for benzene in 1996 and 2003-2005. Sue was diagnosed with NHL six years after her exposure began, which matches the NHL latency period of 3-5 years.

All of the above information is a sufficient basis from which a jury could infer that Sue was exposed to significant amounts of benzene by BP. Those facts serve as a proper foundation from which Dr. Dahlgren could exercise his clinical judgment. Those facts also distinguish the Nelson case.

As for Valentine, supra, it is true that a footnote in this Ohio appellate court case says that a specific causation opinion must be grounded in a dose calculation. Valentine at 615 n.1. However, federal procedural law, not Ohio law, applies to issues of admissibility of evidence. Surles ex rel. Johnson v. Greyhound Lines, Inc., 474 F.3d 288, 296, n.1. (6th Cir. 2007). Accordingly, Valentine's value is limited. And as for Adams, the Adams court made the same mistake that the District Court herein made, in finding that a dose calculation was a required element of a differential diagnoses. It is patently in conflict with Best: In Best, the physician was not required to quantify the amount of chemical which hit the plaintiff in the face, or even yet, determine the amount which went up the plaintiff's nose and into his sinuses. Yet the physician was permitted to give his specific causation testimony.

It is clear that Best is the most complete statement of the law of the Sixth Circuit and compels the conclusion that differential diagnosis through causal reasoning is an appropriate methodology for determining specific causation.

Because the District Court did not recognize this principal of law, the District Court abused its discretion.

C. The District Court erred striking Dr. Dahlgren's Declaration.

At pages 10-12 of its Decision, R. 70, the District Court claims that Dr. Dahlgren contradicted himself between his Report, his Deposition, and his Declaration. As a result, the District Court struck the Declaration. This conclusion was in error. What the trial court interpreted as an improper attempt to contradict Dr. Dahlgren's prior testimony by declaration was only Dr. Dahlgren answering questions not asked by BP in his deposition.

Dr. Dahlgren's expert report fairly summarized his causal reasoning that led to his opinion that BP's benzene caused Sue Pluck's NHL, but did not explicitly identify causal reasoning or differential diagnosis as his methodology. (Expert Report, attached as Exhibit 2 to Declaration of Dr. Dahlgren, R. 51). His report assumed that Sue Pluck had a significant exposure to benzene. As discovery took place, factual information was developed that supported the fact that Sue drank, bathed with, cooked with, and utilized water from an admittedly tainted aquifer. Despite the fact that the amount of benzene exposure cannot be precisely quantified, these facts are sufficient for a jury to conclude that Sue had significant exposure to benzene. These facts are also sufficient to support Dr. Dahlgren's causal reasoning.

Prior to his deposition, Dr. Dahlgren did a back-of-the-envelope estimate of what exposure would result from Sue Pluck drinking the water when there was an odor of gasoline that could be smelled. (Dr. Dahlgren Depo., R. 46, pages 30-32). This was not a comprehensive reconstruction of Sue Pluck's dose over her nine years of exposure – which is impossible in this case. Instead, Dr. Dahlgren explained: "The point being that her exposure, just for those six months, to gasoline-contaminated water in her home would have exposed her to levels many times higher than the level that has been published to increase the risk of leukemia." (Dr. Dahlgren Depo., R. 46, page 32). While this six month rough calculation is not sufficient, by itself, to support a dose-response calculation, it is an appropriate basis for Dr. Dahlgren to include benzene exposure as a possibility in a differential diagnosis.

Dr. Dahlgren's six-month calculation was never intended to be the sole basis of his testimony. He used causal reasoning in his report, even though he did not specifically use the term "differential diagnosis." He was not asked about methodology in his deposition. Then when BP attacked Dr. Dahlgren, BP set up and knocked down the calculation as a straw man, claiming that the calculation methodology was flawed, and refusing to recognize that, as a physician, Dr. Dahlgren could utilize causal reasoning. Even if an error is detected in Dr. Dahlgren's odor threshold calculation, it would go to weight, not admissibility, and

it does not detract from the thrust of Dr. Dahlgren's testimony – given Sue Pluck's exposure to benzene for the other six and a half years, in the absence of other likely causes, it is more probable than not that benzene exposure caused Sue's cancer.

When BP set up this straw man, the Plucks provided Dr. Dahlgren's Declaration, which explained explicitly that which was implicit in Dr. Dahlgren's report – that he used causal reasoning and differential diagnosis to reach his conclusion. Unfortunately, the District Court embraced the straw man and attacked Dr. Dahlgren's rough estimate as being the sole foundation of his testimony. The District Court also missed facts in the record in attacking Dr. Dahlgren's calculation, commenting at page 11 of its decision that "[n]owhere in the record did Plaintiffs claim that the alleged odor of gasoline from their faucet persisted for anywhere near six months." The facts demonstrate otherwise - Sue and Ray Pluck smelled odors similar to gasoline on several occasions throughout their nine years at 605 Fairwood. (Sue Pluck Depo., R. 55, pages 95-96; Ray Pluck Depo., R. 56, pages 12, 16-17).

In an effort to defuse BP's straw argument, Dr. Dahlgren's Declaration stated explicitly what was implicit in his report – that he reached his conclusions through differential diagnosis. The trial court concluded that the Declaration contradicted his report (Decision, R. 70, P. 12), but it does not. Dr. Dahlgren's report reasons to a causal opinion, and the Declaration explains the differential

diagnosis methodology in detail. Dahlgren was never asked in his Deposition what his methodology was. There is no conflict between the three items of testimony. The District Court's decision to strike Dr. Dahlgren's Declaration was an abuse of discretion.

III. The District Court erred in granting summary judgment to BP Oil Pipeline Company.

The District Court granted summary judgment after striking excluding Dr. Dahlgren's testimony. As a result, the District Court found no evidence providing a specific causation link between benzene and Sue Pluck's cancer. As set forth above, the District Court should not have excluded Dr. Dahlgren's testimony. As a result, the District Court erred as a matter of law in granting Summary Judgment to BP.

Conclusion

The District Court should not have excluded Dr. Dahlgren's testimony. Dr. Dahlgren's testimony provides a specific causation link between BP's benzene contamination and Sue Pluck's cancer. As such, the matter should be REVERSED and REMANDED with instructions to the District Court to return the case to its docket and schedule the matter for trial.

Respectfully submitted,

AMER CUNNINGHAM CO., L.P.A.

By: /s/ Tom Houlihan
JACK MORRISON, JR. (#0014939)
THOMAS R. HOULIHAN (#0070067)
159 South Main Street
1100 Key Building
Akron, OH 44308-1322
(330) 762-2411

Certificate of Compliance

Pursuant to Fed.R.App.P. 32(a)(7)(C), the undersigned certifies complies with the type-volume limitations of Fed.R.App.P. 32(a)(7)(B).

1. Exclusive of the exempted portions in Fed.R.App.P. 32(a)(7)(B), the brief contains 7901 words.
2. The brief has been prepared in proportionally spaced typeface using Microsoft Word 2003, in Times New Roman at 14 point size.
3. If the court so requests, the undersigned will provide an electronic version of this document and/or a copy of the word or line count printout.
4. The undersigned understands that a material misrepresentation in completing this certificate, or circumvention of the type-volume limits in Fed.R.App.P. 32(a)(7), may result in the Court's striking the brief and imposing sanctions against the person signing the brief.

/s/ Tom Houlihan
Counsel for Appellants

Certificate of Service

It is hereby certified that on Feburary 16, 2010, service of the foregoing was made upon opposing counsel by filing the Brief in accordance with the Sixth Circuit Guide to Electronic Filing. In accordance with Guideline 10.1 of the Guide to Electronic Filing and Federal Rule of Appellate Procedure 25(d)(1)(B), counsel includes this Certificate of Service.

/s/ Tom Houlihan
Counsel for Appellants

P:\12600\12641\12641 sixth circuit appeal body.doc

Addendum
Designation of Relevant Items from the Record
6 Cir. R. 30(B)

Date Filed	#	Docket Text
10/31/2008	21	Amended Consolidated Complaint against BP Oil Pipeline Company, filed by Sue Pluck, Ray Pluck.
04/15/2009	40	Motion for summary judgment filed by Defendant BP Oil Pipeline Company. Attachments: # 1 Exhibit Deposition excerpts from P. Agostino's deposition, # 2 Exhibit Kerns v. Hobart)
04/15/2009	41	Motion in limine Motion to Exclude the Testimony of Plaintiffs' Expert James Dahlgren, M.D. filed by Defendant BP Oil Pipeline Company. (Attachments: # 1 Brief in Support Memorandum in Support, # 2 Exhibit 1, # 3 Exhibit 2, # 4 Exhibit 3, # 5 Exhibit 4, # 6 Exhibit 5, # 7 Exhibit 6, # 8 Exhibit 7, # 9 Exhibit 8, # 10 Exhibit 9, # 11 Exhibit 10, # 12 Exhibit 11, # 13 Exhibit 12, # 14 Exhibit 13, # 15 Exhibit 14, # 16 Exhibit 15, # 17 Exhibit 16, # 18 Exhibit 17, # 19 Exhibit 18, # 20 Exhibit 19, # 21 Exhibit 20, # 22 Exhibit 21, # 23 Exhibit 22)
04/15/2009	42	Motion in limine Motion to Exclude the Testimony of Plaintiffs' Expert Joseph Landolph,Jr., Ph.D. filed by Defendant BP Oil Pipeline Company. (Attachments: # 1 Brief in Support Memorandum in Support, # 2 Exhibit 1, # 3 Exhibit 2, # 4 Exhibit 3, # 5 Exhibit 4, # 6 Exhibit 5, # 7 Exhibit 6, # 8 Exhibit 7, # 9 Exhibit 8, # 10 Exhibit 9, # 11 Exhibit 10, # 12 Exhibit 11, # 13 Exhibit 12, # 14 Exhibit 13, # 15 Exhibit 14, # 16 Exhibit 15, # 17 Exhibit 16, # 18 Exhibit 17, # 19 Exhibit 18, # 20 Exhibit 19)
05/14/2009	44	Deposition of Deborah L. Gray Ph.D. taken on April 1, 2009. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2)
05/14/2009	45	Deposition of Martin L. Schmidt, Ph.D. taken on April 7, 2009. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5)
05/14/2009	46	Deposition of James G. Dahlgren, M.D. taken on

		February 12, 2009 (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Exhibit 11, # 12 Exhibit 12, # 13 Exhibit 13, # 14 Exhibit 14, # 15 Exhibit 15, # 16 Exhibit 16)
05/14/2009	47	Deposition of David Garabrant, M.D. taken on March 26, 2009 (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7)
05/14/2009	48	Deposition of Patrick Agostino, Ph.D. taken on February 9, 2009 (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Errata 11, # 12 Exhibit 12, # 13 Exhibit 13, # 14 Exhibit 14, # 15 Exhibit 15, # 16 Exhibit 16, # 17 Exhibit 17)
05/14/2009	49	Deposition of Joseph R. Landolph Jr., Ph.D. taken on February 11, 2009 (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Exhibit 11, # 12 Exhibit 12, # 13 Exhibit 13, # 14 Exhibit 14, # 15 Exhibit 15, # 16 Exhibit 16, # 17 Exhibit 17, # 18 Exhibit 18, # 19 Exhibit 19, # 20 Exhibit 20, # 21 Exhibit 21, # 22 Exhibit 22, # 23 Exhibit 23, # 24 Exhibit 24, # 25 Exhibit 25, # 26 Exhibit 26, # 27 Exhibit 27, # 28 Exhibit 28, # 29 Exhibit 29, # 30 Exhibit 30, # 31 Exhibit 31, # 32 Exhibit 32, # 33 Exhibit 33, # 34 Exhibit 34)
05/15/2009	50	Affidavit/Declaration of Joseph Landolph Jr. Ph.D. filed by all plaintiffs. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Exhibit 11, # 12 Exhibit 12, # 13 Exhibit 13, # 14 Exhibit 14, # 15 Exhibit 15)
05/15/2009	51	Affidavit/Declaration James Dahlgren, M.D. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4)

05/15/2009	52	Opposition to 40 Motion for summary judgment filed by all plaintiffs. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10)
05/15/2009	53	Opposition to 42 Motion in limine Motion to Exclude the Testimony of Plaintiffs' Expert Joseph Landolph,Jr., Ph.D. filed by all plaintiffs. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10)
05/15/2009	54	Opposition to 41 Motion in limine Motion to Exclude the Testimony of Plaintiffs' Expert James Dahlgren, M.D. filed by all plaintiffs. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5)
05/15/2009	55	Deposition of Sue Pluck taken on December 4, 2008. (Attachments: # 1 Errata Notice Regarding Exhibits)
05/15/2009	56	Deposition of Ray Pluck taken on December 5, 2008.
05/26/2009	59	Reply to response to 41 Motion in limine Motion to Exclude the Testimony of Plaintiffs' Expert James Dahlgren, M.D. filed by BP Oil Pipeline Company. (Attachments: # 1 Exhibit 1-Deposition of James George Dahlgren dated 2/12/2009, # 2 Exhibit 2-Matilla v. South Kentucky, # 3 Exhibit 3-Magical Farms Inc. v. Land O'Lakes Inc, # 4 Exhibit 4-Article)
05/26/2009	60	Reply to response to 42 Motion in limine Motion to Exclude the Testimony of Plaintiffs' Expert Joseph Landolph,Jr., Ph.D. filed by BP Oil Pipeline Company. (Attachments: # 1 Exhibit Deposition of J. Landolph, # 2 Exhibit Matilla v. South Kentucky Ruroal Electric Cooperative, # 3 Exhibit Nelson, et al. v. Tennessee Gas Pipeline Company, et al., # 4 Exhibit Exhibit 13 to Deposition of J. Landolph)
05/26/2009	61	Reply to response to 40 Motion for summary judgment filed by BP Oil Pipeline Company.
11/25/2009	70	Memorandum Opinion and Order granting defendant's motion for summary judgment and dismissing this matter with prejudice. Further, granting defendant's

		motion to exclude (Docs. # 41 & # 42). The affidavit of Dr. Dahlgren (Doc. # 51) is stricken. Judge John R. Adams on 11/25/09.
11/25/2009	71	Judgment Entry granting defendant's motion for summary judgment and dismissing plaintiff's complaint with prejudice. Judge John R. Adams on 11/25/09.
12/21/2009	72	NOTICE OF APPEAL to the 6th Circuit Court of Appeals from the 70 Memorandum of Opinion and Order and 71 Judgment Entry of 11/25/09, filed by plaintiffs Sue Pluck and Ray Pluck.