THE FIRST JUDICIAL DISTRICT OF PENNSYLVANIA, PHILADELPHIA COUNTY

IN THE COURT OF COMMON PLEAS

BRANHAM	**: TRIAL DIVISION- CIVIL**
	: MAY TERM, 2006
vs.	**: No. 3590 (Lead Case)**
	:
ROHM AND HAAS CO., et al.	**: Superior Court #2199 EDA 2011**
	:

Braham Vs Rohm&Haas Co Etal-OPFLD

OPINION

On August 20, 2011, Plaintiff filed an Appeal to this Court's Order of August 9, 2011. The Order is set forth below in its entirety because it addresses multiple issues which will in turn be discussed.

> AND NOW, to wit, this 9TH day of August, 2011, pending before this Court is Plaintiff's Motion for Post Trial Relief in the form of a request to remove the Non-Suit entered by the Court on April 27, 2011, and in the form of a request to this Court to Recuse itself from any further considerations.
> As to the latter request seeking Recusal, this Motion is denied; primarily because Plaintiff failed to raise this during Trial and only raised it after this Court made its Findings and Order granting an Involuntary Non-Suit which ended Plaintiff's action and secondly, because if the Court would consider such Motion, it would be found to be meritless.
> Addressing the former request to remove the Non-Suit, this also is denied as being without merit.
> The parties are advised that this Court is continuing its review of Defendant's Motion for Sanctions along with Plaintiff's Response to same. This is considered to be collateral to the Trial on the merits as ruled on above, and the above ruling is considered by this Court to be a final and appealable Order.

Subsequent to the filing of the Plaintiff's Appeal, this Court entered an Order on August 31, 2011, directing that Appellant (Plaintiff) file her Statement of Errors pursuant to Pa.RAP 1925(b). This was received by this Court on September 12, 2011, and contains 11 short statements succinctly identifying those matters. Items 10 and 11

address items regarding this Court's refusal to recuse after the Court had stopped the ongoing Trial of this matter and granted Defendant's Motion for Involuntary Non-suit and denied Plaintiff's request for a Mistrial.

The other issues raised concern the decisions of this Court during the course of the Trial, which led to the Court's decision to end the Trial and then subsequently enter judgment for Defendant.

The Statement of Errors does not contain any assignment of error regarding the approximately 50 substantive Orders entered prior to beginning this Trial other than the decision to grant Defendant's Summary Judgment Motion, in part, by striking Plaintiff's claim for strict liability. This was part of the Findings and Order of this Court of February 16, 2010, which denied Defendant's Motion as to Plaintiff's claims of Negligence, Misrepresentation, Fraud and Willful and Wonton Conduct and granted such Motion as to Plaintiff's claim of strict liability and nuisance. Based upon Plaintiff's Statement of Errors, she does not Appeal the Negligence decision (and obviously the three decisions in her favor).

The above is recited to preliminarily address the general claim that this Court erred " in declining to recuse itself from these proceedings." (Statement of Errors, Paragraph 11). The full discussion will follow.

As an initial consideration, it is clear that Plaintiff has waived her right to seek recusal of this Court.

On August 9th, 2011 this Court entered the following Order:

> AND NOW, to wit, this 9TH day of August, 2011, pending before this Court is Plaintiff's Motion for Post Trial Relief in the form of a request to remove the Non-Suit entered by the Court on April 27, 2011, and in the form of a request to this Court to Recuse itself from any further considerations.
> As to the latter request seeking Recusal, this Motion is denied; primarily because Plaintiff failed to raise this during Trial and only raised it after this Court made its Findings and Order granting an Involuntary Non-Suit which ended Plaintiff's action and secondly, because if the Court would consider such Motion, it would be found to be meritless.. .

The Record is clear that this Court discharged the jury in this matter on October

21, 2010 and Plaintiff's attorney promptly moved for a Mistrial. He made no mention of a Recusal Motion.

> MR. FRIEWALD: I would move for a mistrial, Your Honor.

N.T., 10/21/2010, p. 52.

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> MR. VAN WART: We need to confer, Your Honor.

N.T. 10/21/2010, p. 52.

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> THE COURT: The issue of a mistrial at this stage of the trial is, of course, not one to be taken lightly given the investment of time by the parties, and the Court, and this Jury.

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> But because the epidemiological opinion is crucial, and may be the most crucial evidence in this case, I don't believe it is something that can be ignored in its absence, or something that I can reasonably expect the Jury to ignore.
>
> So, if you wish to confer for a few moments, you may.

SHORT RECESS

> THE COURT: Is there a response?
>
> MR. VAN WART: Your Honor, we oppose the motion for a mistrial, and we ask the Court to enter judgment in favor of defendants, because the Plaintiff has no viable causation evidence and they should not be allowed to benefit from either their misconduct or from the nature of the evidence that they put forward. And to enter a mistrial at this point would be to reward them for having assembled a case that includes evidence, such as Dr. Neugebauer's.
>
> So we ask that the Court not declare the mistrial, but enter judgment in our favor.
>
> And then, in addition, we ask that the Court order Dr. Neugebauer to preserve his computer for forensic review so that we can see if there is some additional evidence that bears on the potential issue of misconduct.

N.T., 10/21/2010, p. 54.

> MR. FREIWALD: First of all, I heard things

from Dr. Neugebauer today that I am hearing for the first time.

I don't know what he is talking about, sending any new calculations to me, and I don't accept that. And that's, as far as I know, something that is a complete - -

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MR. FREIWALD: I don't know what really, these changes are that have been presented to me this morning.

I don't know - - I can piece together some of them, but I don't understand it, and I don't know what happened.

I don't know what he was doing last night, all night.

I have a package of these tables I haven't even looked at.

I mean, I don't know - - I don't really understand this myself.

So, to the extent that the report is changed - - and, obviously, it is - - it is not something that I can really speak to.

So, the misconduct issue is not, as far as I am concerned, credible from this witness.

I am saying that this expert is not credible on that issue. I don't even know what he is talking about.

N.T. 10/21/2010, p. 56.

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MR. FREIWALD: I will say this Your Honor, that I think what the Court said yesterday is absolutely right, that mistakes do happen.

The level of mistakes here rises beyond that.

THE COURT: This is not - - this is duplicity in it's most gross and blatant form.

MR. FREIWALD: Your Honor, I am not arguing one bit with that.

And the witness testified himself that it was his carelessness.

THE COURT: I will reserve judgment on what his testimony is, but I can say this fairly, it's not carelessness.

MR. FREIWALD: I am only speaking for myself, and as lead counsel for the plaintiffs here, that my understanding was that these results were credible, that they were supported; and that, moreover, the Illinois State Cancer Registry study, which was vetted in the way that it was, further supported these opinions.

But - -

THE COURT: I can't make that conclusion.

MR. FREIWALD: Your Honor, I am not

meaning to in any way argue with Your Honor, or in any way defend this witness. I am simply referring to my own conduct or our involvement in that.

THE COURT: I understand.

Well, to that end, I am going to ask you to preserve all communication with the doctor from the beginning of the trial until today, and I going to direct that you produce that, subject to, of course, any privilege.

But, given the nature of this inquiry, I would - - it may be a case that all privileges are either waived or I will overrule the privilege, but I will wait until the information is turned over and determine at that point if there are privileges.

We can review it in due course with respect to the honoring of the law in this area.

MR. FREIWALD: That's fine, Your Honor.

And I will freely turn it over.

I am not even going to claim a privilege in that respect.

THE COURT: With respect to entering judgment, I cannot do that now.

And I am going to ask that you submit a formal written motion to enter judgment, and I will give you the opportunity to respond.

The motion will be due in 10 days, and your response is due in 10 days thereafter.

I will be discharging this Jury.

The issue is whether the termination of the trial is mistrial, or by judgment.

N.T., 10/21/2010, pp.58-59.

This Court then discharged the jury and set new briefing schedules at the request of Plaintiff. (See orders of 11/1/10 and 11/21/10). At no time during this period, did Plaintiff file a Motion for Recusal.

Briefs on the subject of Plaintiff's requested Mistrial and Defendant's request for Judgment were filed in early December 2010.

After extensive review of the Record, this Court rendered its Findings and Order on April 27, 2011, wherein extensive findings were made in deciding to grant Defendant's Motion for Involuntary Non-Suit and grant Judgment for Defendants.

Plaintiff did not file a Motion for Recusal during this period. It was only after the Involuntary Non-Suit was entered that Plaintiff asked this Court to recuse itself.

According to Plaintiff, the events of the last few days of the Trial herein were

the basis for Plaintiff's Recusal Motion, yet Plaintiff filed no Motion concurrent to these events and filed no subsequent Motion prior to verdict.

Because of this, Plaintiff's post-verdict Motion to Recuse is untimely and her right to request recusal on these grounds has been waived and need not be addressed post-trial.

Support for this conclusion is found in our Superior Court's opinion in *Reilly v. Septa,*330 Pa. Super. 420; 479 A.2d 973; (1984) and our Supreme Court's seminal opinion in the same case at 507 Pa. 204; 489 A.2d 1291 (1985).

The Supreme Court affirmed the Superior Court's decision in *Reilly*, in part, and it is this part that bears on this issue before this Court.[1]

In *Reilly,* the Superior Court rightly decided that the defendant Septa had not timely filed its Motion for Recusal because it had not been raised during trial and was only raised for the first time during post-appeal pleadings. It found broad support for this in Federal and State Courts.

> If the party fails to object at the earliest opportunity following receipt of actual knowledge, the objection will be held waived. A party may not elect to take a chance on gaining a favorable decision and then, if the decision is unfavorable, raise grounds for recusal of which he or his counsel had actual knowledge prior to the decision being made. *See Delesdernier v. Porterie,* 666 F.2d 116 (5th Cir.) *cert.denied,* 459 U.S. 839, 103 S.Ct.86, 74 L.Ed.2d 81 (1982) (motion untimely when judge made disclosure of relationship pre-trial and recusal motion was made for first time on appeal after two full trials); *Potashnick v. Port City Construction Co., supra* (grounds for recusal raised for first time on appeal not waived because it was not discovered until after trial); *United States v. Conforte,* 624 f.2d 869 (9th Cir.), *cert. denied,* 449 U.S. 1012, 101 S.Ct. 568, 66 L.Ed. 2d 470 (1980) (cannot raise grounds for recusal for first time on appeal when had notice of facts earlier - - timeliness cannot be disregarded in all cases, although it may be in extraordinary cases); *Smith v. Danyo,* 585 F.2d 83 (3d.Cir. 1978) (timeliness is significant because cannot tolerate litigant knowing information and holding back

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1. The part of the Superior Court opinion that was reversed by the Supreme Court addressed the issue of the necessity of the trial judge to decide the issue of recusal when timely raised. The Superior Court had remanded the matter for another judge to decide the recusal. The Supreme Court nullified that part of the opinion trusting in the trial judge's competency to rule on the issue. Id.

> hoping for favorable rulings and then seeking recusal when rulings are not favorable; recusal motion filed three months after events giving rise to objection but before trial and when there had been no rulings in meantime is timely); *United States v. Kelly,* 519 F.Supp. 1029 (D.Mass. 1981) (motion untimely where attorney had knowledge of facts but waited until after six week trial, mistrial and Rule 29(c) motion to file recusal motion); *Commonwealth v. Pavkovich,* 444 Pa. 530, 283 A.2d 295 (1971) (was error for judge who had been prosecuting attorney to sit on court en banc in deciding post-trial motions, but no objection was raised prior to appeal); *Commonwealth v. Musto,* 348 Pa. 300, 35 A.2d 307 (1944) (defendant waived objection when he proceeded to trial without objection, despite knowledge that judge may have been a witness); *Commonwealth v. Bahl,* 111 Pa. Super. 598, 170 A. 346 (1934) (motion untimely when judge made disclosure before Plaintiff completed his case and motion was made at end of defendant's case). *Id.*

The Supreme Court reviewed what had occurred at trial and post-trial.

> When Septa renewed these arguments before Superior Court, it raised for the first time in their post-appeal pleading entitled "Application for Leave to File Supplemental Brief and for Such Other Relief as May be Required to Perfect the Record," *additional* reasons in support of their argument that Judge Kremer should have recused himself. Supporting this application were factual allegations that: (a) Mr. Haaz, his former law clerk: 1) is Judge Kremer's step-nephew, 2) acted as an attorney in this case, 3) represented Judge Kremer in an unrelated case; (b) Judge Kremer (while a practicing attorney) had represented Mr. Haaz and his mother in a legal matter, and (c) that Robert Mongeluzzi, an attorney affiliated with Mr. Daniel's law firm (Daniels, Golden and Saltz, P.C.) is the trial judge's son-in-law.

Having done so in an untimely manner, the Supreme Court affirmed this principle in denying the defendant Septa the right to raise these matters.

> Once the trial is completed with the entry of a verdict, a party is deemed to have waived his right to have a judge disqualified, and if he has waived that issue, he cannot be heard to complain following an unfavorable result. *Commonwealth v. Corbin,* 447 Pa. 463, 291 A.2d 307 (1972). In order to preserve an issue for appeal, SEPTA had to make a timely, specific objection at trial *and*

> raise the issue on post-trial motions. It was not enough to raise new grounds for the first time in post-trial proceedings. Not having followed the proper course, SEPTA waived its right to raise new recusal grounds before the Court *en banc* or Superior Court. (Footnote #6 not included). *Id.*

If the Court finds it necessary and appropriate to rule on the recusal matter then it should find it has no merit when considering what occurred throughout this case.

The action begins with the Complaint filed on May 26, 2006. This Court was the Team Leader of the Day Forward Program for 2006 which essentially means that Major Civil cases filed in 2006 were assigned to and supervised by this Court. This case was so assigned. On June 6, 2006, Defendant filed a Motion for Extraordinary Relief. On June 29, 2006, this Court denied same with the following Order:

> IT IS ORDERED THAT DEFENDANT'S MOTION FOR EXTRAORDINARY RELIEF IN THE FORM OF A "LONE PINE" CASE MANAGEMENT ORDER IS DENIED. THE PA. RULES OF CIVIL PROCEDURE REGARDING DISCOVERY ARE ADEQUATE TO ADDRESS ALL PARTIES' CONCERNS REGARDING THE SCOPE, BREADTH AND NECESSITY OF ANY PARTICULAR REQUEST FOR DOCUMENTS. THE STAY OF DISCOVERY ENTERED BY ORDER OF THIS COURT ON WEDNESDAY, JUNE 28, 2006 IS VACATED SO THAT THE PARTIES MAY PROCEED IN RESPONSE TO THE VARIOUS DISCOVERY REQUESTS NOW EXTNT. THE COMPANION ROHM AND HAAS COMPANY CASES HEREIN IDENTIFIED ARE CONSOLIDATED FOR DISCOVERY PURPOSES ONLY ON THIS COURT'S MOTION. THE LEAD CASE SHALL BE FIRST OF SUCH CASES FILED, WHICH IS JOANNE BRANHAM VS. ROHM AND HAAS COMPANY, ET AL, 0605-3590...BY THE COURT: TERESHKO, J... 6-29-06.

This file was to ultimately become part of a larger consolidation filing numbering around twenty-two (22) cases. The cases all alleged in various forms that Defendants were responsible for the release of toxic substances into the air and groundwater surrounding the manufacturing plants in upper Illinois and that such substances were transmitted through air and water to the general community where Plaintiffs claimed to have resided. The numerosity of Plaintiffs was critical for the advancement of the

central issue common to all Plaintiffs that they were part of a cluster of brain cancer cases located in and around the community of McCullom Lake Village. (A residential community generally south of the Defendant's manufacturing facilities - - uncontested facts).

The beginning phases of the actions were marked by discovery disputes which this Court presided over. The discovery issues centered on accessing document archives which purportedly contained information regarding the production, handling, storing and distribution of the chemicals involved in the alleged toxic infiltration of the Plaintiff's environment. In the initial discovery phases in 2006, the focus was on discovery of the information stored in electronic format. To this end, this Court entered the following Order:

> AND NOW, THIS 20TH DAY OF DECEMBER 2006, IT IS HEREBY ORDERED AND DECREED THAT PLAINTIFFS' MOTION TO COMPEL THE PRODUCTION OF ELECTRONIC DISCOVERY DIRECTED TO DEFENDANTS ROHM AND HAAS COMPANY, ROHM AND HAAS CHEMICALS LLC AND MORTON INTERNATIONAL, INC., IS DENIED IN PART. PLAINTIFF SHALL IDENTIFY TEN SERVERS WHICH SHALL BE SEARCHED AND THE KEY WORDS SHALL BE LIMITED TO THIRTY. THIS IS WITHOUT PREJUDICE TO PRODUCTION OF FUTURE ELECTRONIC DISCOVERY...TERESHKO J.

During 2007 and 2008, this Court was given other Supervising assignments and did not supervise the discovery in this case. In January of 2009, this Court again began to supervise this case and has continued to do so to date.

Beginning in 2009, the cases were progressing through discovery and had been consolidated with the Lead Case being the instant matter in the now twenty-two (22) consolidations.

> 07-09122207-AFTER REVIEWING THE OUTSTANDING MOTIONS REGARDING CONSOLIDATION, IT IS HEREBY ORDERED AND DECREED THAT SUCH MOTION IS GRANTED AND THE TWENTY-TWO (22) CASES ATTACHED HERETO UNDER SCHEDULE "A" ARE CONSOLIDATED FOR PURPOSES OF JUDICIAL ADMINISTRATION AND FOR PRETRIAL MOTIONS WHICH SHALL INCLUDE THE OUTSTANDING

> MOTIONS FOR SUMMARY JUDGMENT BASED UPON THE STATUTE OF LIMITATIONS. THIS CONSOLIDATION IS NOT FOR TRIAL PURPOSES AND WILL NOT AFFECT ANY CASES WHICH ARE APPROACHING TRIAL READINESS. THE FIRST FILED CASE, BRANHAM V. MODINE MANUFACTURING CO., ET AL, MAY TERM, 2006, NO. 3590, SHALL SERVE AS THE LEAD CASE FOR ADMINISTRATIVE PURPOSES. THE TRIAL READINESS OF EACH ACTION SHALL BE ASSESSED ON A CASE-BY-CASE BASIS AND WHERE NECESSARY, CASE MANAGEMENT DEADLINES WILL BE ADJUSTED TO MEET THE INDIVIDUAL NEEDS OF EACH CASE. THE DEFENDANT'S MOTION TO CONSOLIDATE CERTAIN CASES, HEREIN IDENTIFIED UNDER "SCHEDULE B" FOR PURPOSES OF CONSIDERING THE COMMON ISSUE OF THE STATUTE OF LIMITATIONS IS SUBSUMED UNDER THIS CONSOLIDATION ORDER AND WILL BE CONSIDERED AS CONSOLIDATED . . . BY THE COURT: TERESHKO, J. ..1/28/2009.

As noted in the above Order, Defendants filed a Motion for Summary Judgment on the Statute of Limitations Defense.

On September 16, 2009, this Court entered Findings and Order resolving the Statute of Limitations issue in Plaintiff's favor.

The relevant partial Findings follow:

> THE EPIDEMIOLOGICAL EXPERTS FOCUS ON THE PHENOMENA OF THE INCIDENCE OF BRAIN CANCER IN THE TARGET POPULATION. REGARDING THIS ISSUE, IT MUST BE NOTED THAT THE POPULATION OF MCCULLOM LAKE VILLAGE IS AROUND 1100 RESIDENTS. IF THIS IS THE BASE POPULATION UPON WHICH THE INCIDENCE OF THE FORM OF BRAIN CANCER ALLEGED TO BE SUFFERED BY THE RESIDENTS IS CALCULATED, THE EPIDEMIOLOGY EVIDENCE WOULD SEEM TO TAKE ON A SIGNIFICANT MEASURE OF IMPORTANCE. THIS IN TURN IS BOUND UP WITH THE ISSUE OF WHETHER THE "CLUSTERING" OF THESE FORMS OF BRAIN CANCER WOULD SERVE AS AN INDEPENDENTLY OCCURRING EXOGENOUS EVENT AND THEREFORE EVIDENCE ARGUABLY RELEVANT TO THE TOLLING OF THE STATUTE OF LIMITATIONS BY VIRTUE OF

THE "DISCOVERY RULE." THE PIVOTAL QUESTION BEFORE THIS COURT IS WHETHER BY REASONABLE DILIGENCE THE PLAINTIFFS COULD HAVE DISCOVERED THE CAUSE OF THEIR INJURY AND THEN INITIATED SUIT IN A TIMELY MANNER (CITATIONS OMITTED). HERE, THERE ARE AN ABUNDANT NUMBER OF ISSUES IN WHICH THERE ARE HONEST DISPUTES OF FACTUAL MATTERS MATERIAL TO THIS CAUSE OF ACTION. THESE ISSUES INCLUDE BUT ARE NOT LIMITED TO WHAT INFORMATION WAS EFFECTIVELY AVAILABLE, REASONABLY SUGGESTING CULPABLE NEGLIGENT BEHAVIOR OF MOVING DEFENDANTS. WHAT ACTIONS, IF ANY, WERE TAKEN BY DEFENDANTS TO OBFUSCATE THE INFORMATION MADE PUBLICALLY AVAILABLE OR IN ANYWAY SUPPRESS THE INFORMATION THAT COULD BE MADE AVAILABLE REGARDING THEIR POTENTIALLY NEGLIGENT ACTIONS TO FORESTALL A COMPETENT INVESTIGATION BY PLAINTIFFS? THE INHERENT COMPLEXITY OF THE INFORMATION, BOTH IN THE NATURAL PROCESSES WHICH ALLEGEDLY CAUSED THE DELIVERY OF THE SUSPECTED CARCINOGENS TO THE PLAINTIFFS RESULTING IN INGESTION INTO THEIR BODIES AND THE ALLEGED METAMORPHOSIS OF HEALTHY BRAIN CELLS TO CANCEROUS BRAIN CELLS. IN SUPPORT OF THE ABOVE, THIS COURT IS GUIDED BY THE PRECEDENT SET DOWN BY OUR SUPREME COURT AND SUPERIOR COURT IN *FINE V. CHECCIO*, 582 PA. 253, 870 A.2D 850 (2005), AND ITS PROGENY. IN *FINE*, THE GUIDANCE THERE AND THE EXTANT GUIDANCE HERE, DIRECTS THAT SUCH FACTUAL DISPUTES ARE WITHIN THE PROVINCE OF THE FACT FINDER AND NOT WITH THIS COURT.
THEREFORE, CONSIDERING THE ABOVE AND THE RECORD AS A WHOLE, THE SUMMARY JUDGMENT MOTION ON THE STATUTE OF LIMITATIONS IS DENIED.. BY THE COURT : TERESHKO, J...9/16/2009.

On March 15 and 16 of 2009, Defendants filed two (2) *Frye* Motions with this Court seeking to strike Plaintiff's Experts' Reports and preclude such Experts from testifying at Trial on the scientific issues involved in the Trial.

On May 8, 2009, this Court entered Findings and Order that Defendants were entitled to a *Frye* review under Pennsylvania Law and directed that Plaintiff respond to such

Motions.

> THE COURT NOW HAS PENDING BEFORE IT MOTIONS IN THE CONSOLIDATED CASES ABOVE, FILED BY THE DEFENDANTS. THESE MOTIONS SEEK TO EXCLUDE ALL OPINIONS AND EXPERT TESTIMONY PROFFERED BY PLAINTIFFS IN TWO SPECIFIC AREAS. THESE AREAS ARE FAIRLY CATEGORIZED INTO THOSE ISSUES RELATING TO PLAINTIFF'S EXPERT'S THEORIES OF CAUSATION AND EXPOSURE. BRIEFLY STATED, THE MOTIONS CHALLENGE PLAINTIFF'S EXPERT'S THEORIES ON HOW THE PLAINTIFFS WERE ALLEGEDLY EXPOSED TO DEFENDANT'S VINYL CHLORIDE PRODUCT AND HOW SUCH PRODUCT WAS THE ALLEGED CAUSATIVE MECHANISM OF THE PLAINTIFF'S INJURIES. THE ISSUES IN THE VARIOUS CASES ARE NO LESS COMPLICATED BECAUSE PLAINTIFFS IMPLICATE ACTIVITIES OF THE DEFENDANT FROM AT LEAST 1962 AND INCLUDING THE DECADES SUBSEQUENT. DEFENDANTS CLAIM THAT PLAINTIFF'S EXPERT'S METHODOLOGY IN BOTH ITS APPLICATION AND PRESENTATION DOES NOT CONFORM TO GENERAL ACCEPTABILITY IN THE RELEVANT SCIENTIFIC COMMUNITY AND FAILS WHAT IS COMMONLY REFERRED TO AS THE "FRYE" TEST (CITATIONS OMITTED). AFTER REVIEWING DEFENDANT'S VOLUMINOUS MOTIONS, INCLUDING EXTENSIVE MEMORANDA OF LAW WITH EXTENSIVE SUPPORTING DOCUMENTATION, THIS COURT FINDS THAT DEFENDANTS HAVE MET THEIR BURDEN UNDER PA. R.C.P. 207.1 AT LEAST AT A PRIMA FACIE LEVEL SUCH THAT IF PLAINTIFFS ARE GOING TO CONTEST SUCH MOTIONS ON THEIR MERITS, ANSWERS TO SAME MUST BE FILED WITHIN THIRTY (30) DAYS...BY THE COURT: TERESHKO,J...5/8/2009.

On September 24, 2009, this Court denied Defendant's Motion to Exclude Plaintiff's Experts in hydrology and transportation of air contaminants.

> . . . AFTER REVIEWING THE EXTENSIVE MEMORANDA AND EXHIBITS AND THE EXTENSIVE, CHALLENGED EXPERT REPORTS AND EXHIBITS TO SHOW THAT PLAINTIFFS' EXPERTS' OFFERINGS FAIL TO MEET THE "*FRYE*" REQUIREMENT, THE DEFENDANTS HAVE NOT CARRIED THEIR BURDEN.
> PLAINTIFFS' METHODOLOGY USES ACCEPTED, TIME TESTED PROCEDURES FOR CALCULATING, MEASURING AND MODELING WHAT THEY BELIEVE TO BE THE FLOW OF THE ALLEGED

> CONTAMINANTS FROM DEFENDANT'S FACILITY TO THE MCCULLOM LAKE VILLAGE ENVIRONMENT. THE DATA UTILIZED AND THE RESULTING CONCLUSIONS ARE ISSUES OF FACT AND WEIGHT WHICH MUST BE RESOLVED BY THE FACT FINDER. CONSIDERING THIS AND THE RECORD AS A WHOLE, DEFENDANT'S MOTION TO PRECLUDE EXPERTS' OPINIONS RELATED TO EXPOSURE IS DENIED...BY THE COURT: TERESHKO,J... 9/24/2009.

Concurrent with the Defendant's Motion to Preclude Plaintiff's scientific evidence regarding exposure, Defendant filed Motions to Preclude Plaintiff's scientific evidence regarding causation. The three primary forms of scientific evidence were Plaintiff's cancer cluster or epidemiological evidence which provided a platform for Plaintiff's neuropathology and toxicology evidence.

On November 17, 2009, this Court entered a 14-page Findings and Order and denied all of Defendant's Motions, permitting such proffered evidence to be offered at Trial. The full Findings are set forth in the document attached as Appendix "A".

A significant part of these Findings was based upon the epidemiology evidence offered by Dr. Neugebauer. Because a "*Frye*" hearing, by its very nature, is an examination into the scientific methodology employed by the Experts, the data points offered by Neugebauer and the other proffered Experts were accepted by this Court. An inquiry into the validity or credibility of the data points used was not undertaken during this inquiry.

> Defendant's argument essentially attacks the various data points used by the Plaintiff's Expert in arriving at his conclusions. For example, Defendant identifies the four separate geographic areas that Plaintiff's Expert uses and argues that there were overlapping areas and that a cancer case counted in Area 4 was also counted in other areas because of the overlap. While this may be so, Defendant does not support its claim that this is not acceptable methodology because it is clear that Plaintiff's Expert uses different data points, representing a separately calculated <u>expected</u> number of cancer cases based upon the population of each defined area. This is clearly represented by the chart Defendant uses in its Motion.
> (See Chart on p.13 of Appendix "A")
> This is consistent with accepted methodology as the SIR (Standardized Incidence Ratio) is different for each of the

four represented areas because a O (Observed cases) changes the number of E (Expected cases), changes based upon the inherent variable of the sector population. This is logically and methodologically consistent. Defendant also argues that the inclusion of reported cases of persons who worked but did not reside in certain areas fault the methodology. Clearly, it does not, because the inclusion or lack thereof is based upon individual factual issues which are not of the type that this Court can resolve in a *Frye* analysis. Defendants' other criticisms again, do not go to the methodology but to the data points used.

The choice of an observational period for which an accounting is made regarding the hours a person is exposed over the course of time, is a method of determining the denomination or the number of expected cases of cancer in a given time set. The larger the time period would arguably result in a larger denomination in the O/E ratio. Therefore, Defendant says Plaintiff restricted the denomination. This does not invalidate the ratio which is the acceptable methodology, but does argue that the factual basis for deciding what time period is appropriate is an issue for the fact finder to resolve. Defendant also advances the obverse of the above argument when it says that by including full time employees in the designated areas, it inflated the denomination. This apparent anomaly serves to confirm that the argument concerns not the methodology but the data input which has been repeated here, is the province of the fact finder.

Therefore, considering the above and the record as a whole, Defendants' Motion to Preclude related to Causation is Denied.

Findings and Order, 11/17/2009, pp. 12-14. (Appendix "A" here).

The two Findings and Order entered on November 17, 2009, (docketed 11/18/09) were Appealed to the Superior Court by Defendants. These Appeals were later Quashed as Interlocutory on April 8, 2010.

On February 10, 2010, this Court again, ruled in Plaintiff's favor and denied Defendant's Motion to Exclude Evidence of other Cancers.

> NOW, PENDING BEFORE THIS COURT IS DEFENDANT ROHM & HAAS, ET AL'S MOTION TO EXCLUDE EVIDENCE OF OTHER CANCERS IN THE TRIAL OF THESE CONSOLIDATED MATTERS BEGINNING WITH THE *BRANHAM* MATTER WHICH IS THE LEAD CAPTIONED CASE. BRIEFLY STATED, THESE CASES INVOLVE PLAINTIFFS'

CLAIM THAT OVER THE COURSE OF MANY YEARS, DEFENDANTS HAD STORAGE FACILITIES THAT WERE NEGLIGENTLY MAINTAINED, SUCH THAT CERTAIN TOXIC CHEMICALS WERE ALLOWED TO BE RELEASED INTO THE ENVIRONMENT. PLAINTIFFS CLAIM THAT THESE CHEMICALS MIGRATED VIA GROUND AND AIR CONDUITS INTO THE AREA WHICH ENVELOPED MCCULLOM LAKE VILLAGE AND THEN INTO THEIR BODIES TO CIRCULATE INTO THEIR BLOODSTREAMS. PLAINTIFFS GO ON TO ALLEGE THAT THE CHEMICAL MOLECULES WERE NEUROPATHOGENIC IN NATURE, RESULTING IN DISTINCT FORMS OF BRAIN CANCERS WHICH WERE SUFFERED BY RESIDENTS OR FUNCTIONAL RESIDENTS OF THE MCCULLOM LAKE VILLAGE COMMUNITY. IN SUPPORT OF THEIR RESPECTIVE CLAIMS, PLAINTIFFS PRODUCED EXPERTS WHO OFFERED OPINIONS ON EXPOSURE AND CAUSATION USING THEIR RESPECTIVE DISCIPLINES WHICH ARE EPIDEMIOLOGY, TOXICOLOGY AND NEUROPATHOLOGY. CENTRAL TO THE ANALYSIS OF THE EXPERTS, IS THE NUMBER OF CASES OF BRAIN CANCER IN THIS DEFINED COMMUNITY AND THE COMMONALITY OF THE CAUSAL MECHANISMS WHICH ARE ENCAPSULATED HERE FOLLOWING:

MIGRATION BY AIR AND WATER

PLAINTIFFS' EXPERT OPINES THAT VC (VINYL CHLORIDE) BY-PRODUCTS, FOUND IN LIQUID WASTE GENERATED BY DEFENDANTS' PLANT, WERE STORED IN AN OUTDOOR STORAGE FACILITY (LAGOON), WHICH INTRODUCED THE VC MOLECULE INTO THE AIR AND GROUNDWATER, WHICH PROVIDED THE PATHWAY TO THE SUBJECT COMMUNITY.

NEUROPATHOLOGY

PLAINTIFFS' EXPERT OPINES THAT THE VC MOLECULE WAS ABSORBED BY THE NUMEROUS PLAINTIFFS AND CAUSED A GENETIC MUTATION COMMONLY EXPERIENCED BY PLAINTIFFS WHICH RESULTED IN DISTINCT FORMS OF BRAIN CANCER.

EPIDEMIOLOGY

PLAINTIFFS' EXPERT OPINES THAT THE INCIDENCE OF BRAIN CANCERS PRESENT IN THE COMMUNITY, IN THE RELEASED VC MOLECULE EXPOSURE ZONE, WERE SIGNIFICANTLY

ELEVATED AND THAT THE PROBABILITY THAT SUCH INCREASE WOULD BE DUE TO NON-RANDOM FACTORS, WAS SUFFICIENTLY ELEVATED TO ALLOW A CAUSAL INFERENCE TO BE REASONABLY DETERMINED. AS CAN BE READILY OBSERVED, THE GRAVAMEN OF THIS COMPLAINT IS OF A PIECE OF THE CONSOLIDATED ACTION WHICH ALLEGES SUBSTANTIALLY THE SAME HARM TO MULTIPLE PERSONS FROM THE SAME SOURCE VIA THE SAME MECHANISM OF EXPOSURE.
IF GRANTED, DEFENDANT'S MOTION TO PRECLUDE EVIDENCE OF THESE OTHER CANCERS WHICH ACTUALLY FORM THIS TEXTUALIZED CLAIM, WOULD BE A DECONSTRUCTION OF THE TORT AND WOULD BE SEVERELY PREJUDICIAL TO THE PLAINTIFF IN HIS INDIVIDUAL CLAIM AND TO ALL COMMON PLAINTIFFS IN THEIR RESPECTIVE CLAIMS.
DEFENDANT'S ARGUMENT THAT EVIDENCE OF THE INCIDENCE OF THE OTHER CANCERS COMMON TO THE PLAINTIFFS WOULD UNFAIRLY PREJUDICE THE DEFENDANTS, FINDS NO PURCHASE HERE. THIS IS BECAUSE THE ALLEGED HARM IS TO THESE PLAINTIFFS COLLECTIVELY ONLY, MANIFESTED BY THESE INDIVIDUAL CLAIMS. IN OTHER WORDS, THE HARM IS COMMON TO ALL FROM A COMMON SOURCE. THIS IS HOW THE EVIDENCE MUST BE ALLOWED TO BE PRESENTED. DEFENDANT'S EVIDENCE WOULD BE TO ESTABLISH THAT IT DID NO HARM OR THAT THE HARM IT DID, DID NOT CAUSE THE PLAINTIFF'S INJURY. IF SUCCESSFUL, IT WOULD BE APPLICABLE TO THE INDIVIDUAL AND THEREFORE THE GROUP, BECAUSE THE REJECTION OF THE INDIVIDUAL ELEMENTS OF THE CAUSAL HARM WOULD BE A REJECTION OF THE COMMON HARM.
DEFENDANT'S COURSE OF ACTION WOULD BE NECESSITATED BY THIS AND EXECUTED AT TRIAL BY VIGOROUS CROSS-EXAMINATION OF THE PLAINTIFF'S EVIDENCE AND THE ADVANCEMENT OF ITS OWN EVIDENCE TO COUNTER THAT OF THE PLAINTIFF.
CONSIDERING THIS AND THE RECORD AS A WHOLE, DEFENDANT'S MOTION IN LIMINE TO EXCLUDE (AND SUBSTITUTE) EVIDENCE OF OTHER CANCERS IS DENIED..BY THE COURT:

TERESHKO,J...2/4/2010.

The above rulings on Defendant's Motion are presented as a representative sample of the Pre Trial rulings which were in Plaintiff's favor on the most critical scientific aspects of her case. Such rulings allowed Plaintiff to proceed to Trial with her theories of liability and causation intact.

To the extent that Plaintiff's Recusal Motion and Paragraph 11 of her Statement of Matters Complained of Upon Appeal contain any notion of bias or prejudice to Plaintiff, the Pre Trial rulings in Plaintiff's favor should effectively demonstrate that there is no merit to such claim.

In Paragraph 10 of Plaintiff's Statement, she alleges error as follows:

> The Trial Court erred in being unduly influenced by emotion during these proceedings. *Id.*

The basis of this claim appears to derive from the events surrounding this Court's decision to terminate the Trial. These events are fully laid out in this Court's Findings and Order of April 27, 2011, (incorporated herein and found as Appendix "B"), but some points will be narrowly developed here for ease of reference.

Plaintiff's theory of causation was based upon her attorney's theory of a cancer cluster.

> And, remember, His Honor has explained, and will explain again, the burden of proof and those scales, how they have to tip ever so slightly for the plaintiffs to meet the burden of proof.
>
> Ninety-five percent probability is far in excess of what we need to prove to win this case, and to prove that this is a cancer cluster, and that Mr. Branham is part of a large brain cancer cluster.

Plaintiff's attorney's opening statement. N.T., 9/20/2010 A.M. Session, pp 64-66.

In support of this theory, Plaintiff offered Dr. Neugebauer as an Expert on the epidemiological nature of the cancer cluster theory. On October 20, 2010, after a month into the Trial and about a week into Dr. Neugebauer's testimony, under intense cross-examination by defense counsel, serious issues began to develop about Dr. Neugebauer's methodology in employing epidemiological principles in his theory of causation based upon these principles.

Dr. Neugebauer was asked about the presence of Ms. Roszak in the study:

Q. Now, another person that you included for glioblastoma was Ms. Roszak, and she's in Area 1; and she's also in Area 2, right?
A With all due respect, I believe that that's a mistake.
Q. This is a mistake? This is the letter that we got from Mr. Ellis.
A. I understand that.
Q. So what's the mistake?
A. This particular individual was not included in the analysis.
Q. Do you know who was included in the analysis? First of all, have you told the attorneys that this is an error?
A. The other day, yes.
Q. The other day? When did you tell them?
A. If I said the other day, I meant the other day.
Q. Well, what's the other day?
A. Oh, I see. I didn't see this particular page until the other day.
Q. Right. You say this page what, in preparation for your testimony?
A. Yes.
Q. And then you said you say this—they said you might be asked questions about this letter?
A. I beg your pardon.
Q. Did they show it to you saying that you might be asked questions about this letter?
A. About what letter?
Q. Are we talking about the same thing? This chart is from a letter.
A. Oh, I'm sorry. I forgot exactly how it came up but I looked at that and I said – I looked at this table and I said that particular individual is not one of the cases included in the analysis.
Q. Well, how many days ago was that?
A. I don't remember offhand.
Q. Did you come into town on Sunday?
A. Yes.
Q. Do you have any idea why we haven't been told, why we're just learning this right now?
A. I do not have an idea why.
Q. Did you say to the attorneys: You know what, you'd better let them know because they thought for several years that you provided them correct data?
A. I did not – I did not tell them that.

N.T. 10/20/2010, P.M. Session, pp. 82-84.

The testimonial admissions that one of the four observed cases of glioblastoma

relied upon Dr. Neugebauer, did not belong in the analysis (reducing the "O" component of the "O/E=S.I.R." by 25%) precipitated a series of events which began with the revelation for the first time that Dr. Neugebauer had "redone" his calculations prior to the beginning of trial.

> Q. So, how many cases did you have in Area 1?
> A. The other three people are cases.
> Q. Doctor, you testified earlier that in your Area 1 analysis where you had fewer cases than expected the number was four against six, more than six expected. 6.565 expected. That's on the other chart. Is there a fourth case or is it three?
> A. That would take me a moment, more than a moment to determine.
> Q. Do you have the name? What did you tell the lawyers the other day? Did you tell them the correct name or the correct number?
> A. Yes, I did.
> Q. What did you tell them?
> A. I would take me a moment or so to find the page on which that is listed.
>
> • • •
>
> BY MR. VAN WART:
> Q. Have you redone your calculations?
> A. Yeah. Yes, I have.
> Q. Did you give those to the lawyers?
> A. Yes, I have.
> Q. Did you do that a couple of days ago?
> A. No, some time ago. A few weeks ago.
> Q. Do you know why we haven't received those new calculation?
> A. No, I do not.

N.T. 10/20/2010, P.M. Session, pp. 85-86.

The witness repeated the testimony as to Ms. Roszak's erroneous inclusion in response to questions by the Court.

> THE COURT: Why do you believe that – why do you believe and why did you communicate to counsel that Ms. Roszak was not properly included in Area 1 and Area 2?
>
> THE WITNESS: I think there was just a general miscommunication between us as to who was in which area.
>
> THE COURT: You believe that Ms. Roszak should have not been properly included in Area 1?

THE WITNESS: I believe that her – that is true. I think she should not be.

THE COURT: Well, let's go back. Just so we can define the specific parameters of what is included in Table 1. What type of study is Table 1 as described in the document D-2099?

THE WITNESS: Table 1—sorry. Table 1, Target Area 1 refers to the enumeration of cases in an ecologic study.

THE COURT: And you believe that Ms. Roszak is not properly included in Target Area 1 in your ecological study?

THE WITNESS: Yes.

N.T., 10/20/2010, P.M. Session, pp. 96-97.

Plaintiff's counsel argued during a sidebar that Dr. Neugebauer was mistaken and that Ms. Roszak should have been included.

THE COURT: Does Roszak belong in the analysis under an ecological study?

MR. FREIWALD: She does.

THE COURT: Well, then why is he confused about it?

MR. FREIWALD: I can't go talk to him so I can't explain that. Other than what I'm suggesting and I think he will figure it out when goes and looks. He is showing him a letter that he didn't create, and I'm not saying this is unfair.

THE COURT: He created the issue by saying that Roszak doesn't belong there.

MR. FREIWALD: But, he's wrong about that.

THE COURT: He created that issue.

N.T., 10/20/2010, P.M. Session, pp. 90-91.

The Trial resumed the next morning and Plaintiff's counsel, Mr. Freiwald, retracted his statement that Ms. Roszak had been properly included in the Study in Area 1 and Area 2.

MR. FREIWALD: I want to correct something. I said something on the record that –

MR. VAN WART: I would like to talk first about what happened with Dr. Neugebauer. That's part of the issue here.

MR. FREIWALD: I said something to the Court yesterday that I need to correct, because I said –

MR. VAN WART: It's a little bit late.

MR. FREIWALD: Can I just say this?

THE COURT: We are on the record. Go ahead.

MR. FREIWALD: When we went to sidebar I said that I believed what the witness was testifying to at that moment was a mistake—about there being a mistake.

THE COURT: I remember.

MR. FREIWALD: I was partly right and I was partly wrong; innocently, that is, not with any intention.

The Roszak case—I went back to the office last night and checked the inclusion of Roszak in the Target Areas 1 and 2 of this first study that is in his 2008 report, and she is on the map in the location that I said, but she shouldn't have been included in that target are because the date for diagnosis—the data for diagnosis, I believe, is not within the '96 to 2007 parameters for that study.

N.T., 10/21/2010, A.M. Session, pp. 5-6.

The previous day, which was October 20, 2010, the Court ended the Trial for the day early because of the importance of this issue to the methodologies of Dr. Neugebauer's calculations and the prior testimony regarding other issues of methodology and Plaintiff's counsel's representation to the Court, this Court thought it best to adjourn Court to allow for any confusion, prior to the next Court day.

THE COURT: All right. I can honestly represent to the parties and the jury based upon the conversation that I had at sidebar with all parties that there may be an honest mistake of fact and I'm going to allow the parties time to clarify that issue.

We're going to adjourn for the day. And, Doctor, without allowing you to have communication with counsel, which I am again prohibiting, I am directing you to review your notes during the recess, the adjournment, and to look at the data.

THE WITNESS: Yes.

THE COURT: And to ask again the question of whether or not Ms. Roszak's inclusion in Area 1 is proper or, based upon what you've just told us, is improper. And I think you need to go back and look at some more of the supporting data which may have been present at the time of your original conclusion and determine if anything had changed your mind about the inclusion.

THE WITNESS: Understood.

THE COURT: And I'll give you that latitude because it has been a long couple days and there is a lot of information. We're all human and we're all subject to making human mistakes.

THE WITNESS: Thank you, Your Honor.
N.T. 10/20/2010, P.M. Session, pp. 99-100.

The Court reconvened the next day on October 21, 2010, and it was revealed during an in-camera conference that Ms. Roszak never resided at the address listed and that it was her parents' residence that she visited occasionally. (See below). More disturbing to the Court was that Dr. Neugebauer did not limit his review to the Roszak issue as directed by the Court but went on to make 21 changes in his Report of various types.

> THE COURT: If you have four people and you are basing your SIR on four cases and you lose one, you have a 25 percent reduction.
>
> It's more than –
>
> MR. FREIWALD: In those two study areas.
>
> But, in those two study areas we are not expecting to see cases because those are outside the contamination areas.
>
> And that's verified by the cancer registry study that comes along and provides the definitive –
>
> THE COURT: I am going to let the witness bear the burden of supporting his opinion.
>
> MR. FREIWALD: I understand that.
>
> THE COURT: One of the reasons I didn't want there to be any communication—not that I doubted your integrity, but in a situation where the impeachment has gotten to the level that is now, it raises a lot of issues for the Court.
>
> Mr. Van Wart?
>
> MR. VAN WART: Your Honor, it is much, much worse than what Mr. Freiwald just described.
>
> The doctor submitted a report this morning between 7:00 and 8:00.
>
> He has 21 changes to his analysis.
>
> Twenty-one.
>
> Now, in his analysis, the original ecological analysis that gets everybody up in arms, now three of the four areas are not statistically significant.
>
> His cohort analysis, which he testified to on the stand, now that is not statistically significant.
>
> He is moving people in and out.
>
> A lot of changes.
>
> And then he just sent us at 8:24, I think it's about 20 attachments—60 attachments.
>
> So, he is—basically he has been up all night essentially redoing his analysis.

And so it seems like the only remedy at this point is to strike his opinion altogether.

It is an affront to the Court.

And in what makes it worse is that he testified unequivocally that he already had informed Mr. Freiwald about these problems and we were never given any warning about that.

And Mr. Freiwald continues to make misstatements about even Miss Roszak.

Miss Roszak never lived in McCullom Lake Village. She only—Dr. Neugebauer's criteria for inclusion in his study is you either had to live there or you had to work there.

THE COURT: What was presented as an address and residence?

MR. VAN WART: She visited her parents on weekends because her parents were sick. She never lived there.

And, so, even though she didn't meet the inclusion criteria, he still puts her in there.

And, so, for Mr. Freiwald, he said it to you yesterday, that she lived there, that is just absolutely false.

And there were problems with these other cases they are including.

So we ask the Court to strike Dr. Neugebauer's opinion.

And we are compromised because now we are getting—not even at midnight, we are getting it two hours before he is supposed to take the stand—a brand new analysis.

We don't know all of the details of all these that he has given us.

And counsel had notice of these changes, and it only came out on cross-examination that he had had this information and he was sitting on it and just hoping that we weren't going to get into these issues.

N.T. 10/21/2010, A.M. Session, pp. 9-12.

At this in-camera conference, Defendants made an oral motion to strike and before ruling on this motion, this Court conducted a voir dire on the issues raised. The voir dire was lengthy, extending to forty (40) pages of testimony. (See pp.12-52, N.T., 10/21/2010, A.M. Session).

At the conclusion of the voir dire, the Motion to Strike was granted.

MR. FREIWALD: That's all I have, Your Honor.

MR. VAN WART: Nothing else.

THE COURT: All right.

With respect to the Motion to Strike, I am going to grant the Motion.

Having heard the Doctor over the last two days, the troubling aspects of his report surfaced both subtly and in more immediate ways, and the events of yesterday afternoon became – were troubling to the Court, and it caused me to review some of the earlier testimony of the Doctor, and it gave me no pause in my analysis that his report was troubling.

It is as close as I have come sitting on the bench for 20-plus years to having a report that may be tantamount to fraud on the Court, and I will not allow this testimony to continue.

Do you have a motion, following my motion to grant, to strike?

MR. FREIWALD: I would move for a mistrial, Your Honor.

MR. VAN WART: We need to confer, Your Honor.

N.T. 10/21/2010, A.M. Session, pp. 52-53.

MR. VAN WART: Your Honor, we oppose the motion for mistrial, and we ask the Court to enter judgment in favor of Defendants, because the Plaintiff has no viable causation evidence and they should not be allowed to benefit from either their misconduct or from the nature of the evidence that they put forward. And to enter a mistrial at this point would be to reward them for having assembled a case that includes evidence, such as Dr. Neugebauer's.

So we ask that the Court not declare the mistrial, but enter judgment in our favor.

N.T. 10/21/2010, A.M. Session, pp. 53-54.

THE COURT: With respect to entering judgment, I cannot do that now.

And I am going to ask that you submit a formal written motion to enter judgment, and I will give you the opportunity to respond.

The motion will be due in 10 days, and your response is due in 10 days thereafter.

I will be discharging this Jury.

The issue is whether the termination of the trial is by mistrial, or by judgment.

And I am not in a position to make that decision now, nor – I think it is such a weighty decision that – I need to have time and some separation, because my immediate

emotion is based upon what I concluded was a direct intention to defraud this Court by that witness.

I don't want to respond being subject to the emotion that I have now.

So, I need some time and distance to be a little bit less passionate about the issue.

But the issue will turn on the evidence, or lack thereof.

And I will make the decision in a timely manner.

N.T. 10/21/2010, A.M. Session, pp. 59-60.

On October 22, 2010, this Court entered an Order addressing the issue of Plaintiff's attorney turning over all communications between his office and Dr. Neugebauer and setting a briefing schedule for the above-referenced Motions and Responses:

> AMENDED ORDER: **AND NOW**, this 22nd day of October, 2010, on the Court's own Motion, Plaintiff's attorney is to produce on or before the close of business on October 25, 2010, all communication between any member of the law firm, including support staff, with Dr. Neugebauer regarding the changes in his Expert Report which were the subject of the in-camera hearing on October 21, 2010. Plaintiff's attorney is further ordered to advise Dr. Neugebauer of this Order. Dr. Neugebauer is ordered to produce, through Plaintiff's attorney, on or before the close of business on October 25, 2010, all communication he has had with any member of Plaintiff 's attorney's law firm, including support staff, regarding the changes in his Expert Report which were the subject of the in-camera hearing on October 21, 2010. Dr. Neugebauer is also ordered to produce any and all files, including any notes, work papers, or other documents, regarding his analysis and calculations, including any changes to his Expert Report. Dr. Neugebauer is further ordered to preserve the contents of his computer and any other device that he has used in connection with this work on this case and/or for communications with Plaintiff's counsel and his staff.
> The Bench Order regarding the filing of Briefs on the Plaintiff's Oral Motion for Mistrial and Defendants' Oral Motion to Enter Judgment for Defendant Rohm & Haas is modified as follows:
> The Plaintiff's Briefs in support of her Oral Motion for Mistrial is to be filed and her Reponse to Defendants' Oral Motion to Enter Judgment on behalf of Defendant Rohm & Haas shall be filed on or before November 15, 2010.
> The Defendants' Briefs in support of its Oral Motion for

Entry of Judgment and its Reponse to Plaintiff's Motion for Mistrial shall be filed on or before November 15, 2010.

The above Order was Amended on November 1, 2010, to allow the briefs to be filed on November 29, 2010.

Upon Plaintiff request, the briefing schedule was extended to December 6, 2010. (See Order of 11/22/2010).

After reviewing this file for over three and one-half months, this Court entered a forty-nine (49) page *Findings and Order* granting Defendant's Motion for NonSuit. These *Findings* are a detailed analysis of the Record before the Court along with the Reports and Testimony in this Trial.

As the previous record demonstrates, before this Court decided to grant Defendant's Motion for Nonsuit, it removed itself from the moment in which it ended the Trial in this matter, afforded itself ample time to review the full Record in the matter and then rendered a detailed Finding, citing the Record extensively.

Plaintiff's dual and intertwined claims that the Court was unduly influenced by emotion during these proceedings and that because of these emotions the Court should have recused itself before denying Plaintiff's Post Trial Motions, is entirely contradicted by the Record in these proceedings.

As noted above in the brief history of this action, this Court granted Defendant's Motion for Nonsuit on April 27, 2011 after ending the Trial on October 21, 2010.

At the time this Court ended such Trial, Plaintiff had not completed her case-in-chief and had not rested her case. Upon ending the Trial, Plaintiff moved for a Mistrial while Defendant moved for entry of Judgment in their favor.

As part of Plaintiff's "Statement" she raises in points 1 and 2 the following:

1. The trial court erred in granting a compulsory nonsuit before the Plaintiff had completed her case-in-chief.
2. The trial court erred in failing to apply the correct standard of review in granting nonsuit.

For purposes of this Opinion, they are considered together.

The issue of whether the granting of a compulsory nonsuit was proper prior to the Plaintiff completing her case-in-chief was addressed by our Superior Court in *Liles v. Balmer*, 439 Pa. Super.238; 653 A.2d 1237 (1994). (Petition for Allowance of Appeal

denied August 1, 1995, Reported at 1995 Pa. Lexis 564).

In *Liles*, the Trial Court had before it certain evidentiary issues involving the cause of plaintiff's injury. After the Court precluded the evidence, plaintiff's counsel conceded that he had no other causation evidence and defendant moved for a compulsory nonsuit. Although plaintiff had not completed her case-in-chief, the Trial Court granted the defendant's Motion and entered the Nonsuit.

The Superior Court recognized the "technical defect" in the Motion and then went beyond this to focus on the critical issue of the failure of plaintiff's evidence of causation.

> Appellant contends that the entry of the nonsuit was improper because it occurred prior to the close of her case and before all of her evidence was admitted. While appellant is technically correct, her argument ignores the fact that she had no remaining competent and relevant evidence to present on the issues of negligence and causation. In fact, appellant's own counsel admitted that the trial court's competency determination as to plaintiff's evidence precluded appellant from proceeding with her case. (Internal citation omitted). Because appellant's case was essentially complete prior to the entry of the nonsuit and because appellant wholly failed to present any evidence . . . (of the) proximate cause of her injuries appellant clearly was not entitled to any relief. (Internal citations omitted).

Liles Id.

In the instant matter, Plaintiff's counsel's conduct mirrored the conduct in *Liles* after this Court ruled that it was striking the testimony of Plaintiff's expert epidemiologist, Dr. Neugebauer, on whom Plaintiff's causation theory rested.

> THE COURT: All right.
>
> With respect to the Motion to Strike, I am going to grant the motion.
>
> Having heard the Doctor over the last two days, the troubling aspect of his report surfaced both subtly and in more immediate ways, and the events of yesterday afternoon became—were troubling to the Court, and it caused me to review some of the earlier testimony of the Doctor, and it gave me no pause in my analysis that his report was troubling.
>
> It is as close as I have come, sitting on the bench for 20-plus years to having a report that may be tantamount to fraud on the Court, and I will not allow this testimony to continue.

> Do you have a motion, following my motion to grant, to strike?
>
> MR. FREIWALD: I would move for a mistrial, Your Honor.

N.T., 10/21/10, A.M. Session, pp. 51-52.

Defendants later moved for Judgment in their favor by way of Nonsuit which this Court granted.

Having now established that the technical defect of Plaintiff not resting is not a bar to the entry of Nonsuit where Plaintiff ostensibly had no causation evidence, the focus must now shift to the standard that this Court must meet in order for the Nonsuit to stand.

This standard was iterated in *Hong v. Pelagatti*, 2000 Pa. Super. 373, 765 A.2d 1117 (2000).

> A Motion for compulsory non-suit allows a defendant to test the sufficiency of a plaintiff's evidence and may be entered only in cases where it is clear that the Plaintiff has not established a cause of action; in making this determination, the Plaintiff must be given the benefit of all reasonable inferences arising from the evidence. When so viewed, a non-suit is properly entered if the Plaintiff has not introduced sufficient evidence to establish the necessary elements to maintain a cause of action; it is the duty of the trial court to make this determination prior to the submission of the case to the jury. When this Court reviews the grant of a non-suit, we must resolve all conflicts in the evidence in favor of the party against whom the non-suit was entered.
>
> *A compulsory non-suit is proper only where the facts and circumstances compel the conclusion that the defendants are not liable upon the cause of action pleaded by the plaintiff.*

Id. (Citation and Quotation Marks Omitted).

Under this standard, this Court must examine the Plaintiff's case-in-chief and consider the evidence that Plaintiff offered or was awaiting to offer in support of her theory of causation.

Again, referring to the history of this case described herein, Plaintiff's causation evidence was constructed with and relied upon the opinions of three (3) Experts. The primary Report was that of Dr. Neugebauer, Plaintiff's Epidemiologist, who opined that

Plaintiff was one of a number of Plaintiffs in this group represented by Plaintiff's lawyer who were part of a cancer cluster living in proximity to Defendant's plaint. This Expert witness and his Report and testimony in support thereof was stricken by this Court. There were extensive Findings by the Court which were filed on April, 27th, 2011 in support of this. (Attached here as Appendix "B").

Plaintiff also relied upon Dr. Finkelstein, whose area of expertise is Neuropathology. Plaintiff's Expert attempted to establish a connection between alleged exposure and the specific brain cancer suffered by Plaintiff. As detailed in this Court's Findings and Order of April 27, 2011, (Appendix "B"), Dr. Finkelstein's expert evidence was stricken for two (2) primary reasons. The first became manifest when the Expert retracted his Opinion as to specific causation of Plaintiff's brain cancer.

> Q. Now, several times in response to the questions from Mr. Freiwald you mentioned vinyl chloride. Do you recall that?
> A. Yes.
> Q. Doctor, vinyl chloride is nowhere mentioned in your report; correct?
> A. If it is not mentioned, then it is not there.

N.T. 10/4/10, P.M. Session, pp. 21-22.

> Q. Doctor, is there any statement in your report that vinyl chloride, specifically vinyl chloride, caused Mr. Branham's brain cancer?
> A. Without rereading the report, I have no recollection. I would have to say no. But I would like to reread it to be accurate.

N.T. 10/4/10, P.M. Session, p.22.

> BY MR. VAN WART:
> Q. Would you agree that within the epidemiological literature regarding brain cancer and its causes, that the only scientifically and medically-accepted environmental cause of brain cancer is ionizing or therapeutic radiation?
> A. I have heard.
> I have -- the way you phrase that does remind me of things that I have read, so I think that is – that is probably a true statement.
> On the other hand, there's a lot we don't know about cancer. Things can change over time. Things evolve. And I can't remember whether I read that in that older literature. Is that newer literature?

Were you asked that question, and did you give that answer?

A. I did.

But, as you can see, I'm not someone who really focuses on toxic exposure and epidemiology.

Q. Now, when you're looking at the exposure that you understand from somebody else occurred, you are actually not able to distinguish what specific chemical or agent cause this pattern that you say you've observed?

A. Yes.

Q. You cannot?

A. I cannot.

Q. And it's your position that anything that is genotoxic that somebody was exposed to could have caused it?

A. Yes.

Q. And you have not, as part of your investigation, tried to determine what other types of things people might have been exposed to to see if that could account for the pattern that you have presented here?

A. That's correct.

That's not work which I do, but which I would think other would do in this case.

Q. So virtually anything in their background experience that is chemical or genotoxic could have caused the pattern that you observed in these people?

A. That's correct.

Q. And you are not able to say at any particular given case what the specific chemical was, if any, that caused that pattern?

A. That's correct.

Again, I would – I would expect others, as part of a team, to contribute that information.

Q. Right.

But in terms of the mutational analysis that you presented, you cannot say as to any specific individual what the exposure was that caused it in a particular individual?

A. Yes, that's correct.

N.T. 10/5/10, A.M. Session, pp.77-79.

The second arose when his scientific methodology was found to be non-existent and pure speculation in the form of an unsupported logical construct.

1. He began using, as a premise for his methodological approach, the conclusions developed from the German studies which established very high dose workplace exposure to the TCE chemical resulted in an increase in

> liver cancer (RCC) which was evidenced by mutation of the VHL gene on chromosome 3.
> 2. He then went on to speculate that since TCE is a chlorinated solvent, and the VHL gene was on chromosome 3, then any mutations on chromosome 3 were the result of some exposure to chlorinated solvents.
>
> 3. He advanced his speculation by assuming that since there are mutations on chromosome 3 then there is a causal relationship between exposure to chlorinated solvents and glial formations, (gliomal type brain cancer), because it is uncommon to find chromosome 3 mutations in sporadic (naturally occurring) glial formations, (glioma brain cancers as we have here).
>
> This speculation is factually and legally barren of any support in the Record before this Court.

Finding and Order of April 27, 2011, attached as Appendix "B"

The Plaintiff's third causation Expert was Dr. Ginsberg who is a Toxicologist by profession and produced a Report identified by him as a "toxicological review and analysis of the brain cancer case of Franklin Branham." (Unnumbered page of his report of 10/25/2008). Findings and Order of April 27, 2011, attached as Appendix "B".

The Report discusses many diverse topics while working to its final conclusion of causation. In the Findings and Order of April 27th, 2011, this Court found that Dr. Ginsberg's conclusion as to causation relied fundamentally upon Dr. Neugebauer's now stricken opinion as to the existence of a brain cancer cluster.

On page three of his Report, Dr. Ginsberg acknowledges the role of the epidemiological evidence as a central premise of his conclusion, i.e., elevated brain cancer rates in the community subject to exposure, (McCullom Lake Village) and a commonality of tumor type within the same body of residents.

> Mr. Branham's tumor occurred against the backdrop of elevated brain cancer rates in the community he had resided in for 36 years, McCullom Lake Village, Illinois. The concern that these brain cancer cases are linked is supported by the fact that they are of a common type (glial tumors-oligodendroglioma, glioblaxtoma multiforme). The concern that they stem from an environmental cause is supported by the fact that McCullom Lake Village is just south (1.25 miles) of a major industrial area in Ringwood Illinois. Chlorinated solvent contaminants and their breakdown products, most notably vinyl chloride (VC),

> were released from the Ringwood industries over a period of approximately 50 years. This led to long-term industrial solvent exposures to Mr. Branham and other residents in and around McCullom Lake Village, with this contamination occurring in outdoor and indoor air. Certain homes, including Mr. Branham's, were also within the groundwater plume extending southward toward the village that transported VC into potable wells in the village.

Id.

This is the same epidemiological approach relied upon by Dr. Neugebauer in his Report.

In the opening pages of Dr. Neugebauer's Report, he lays out what his objective is:

> To show that the incidence rates of two brain cancers – oligodendroglioma and glioblastoma—among persons exposed to carcinogens released into the environment by Rohm and Haas/Modine in McHenry County Illinois are elevated relative to the expected incidence rates of these brain cancers among persons unexposed to these compounds.

Dr. Neugebauer's Report 2008, p. 5.

> He intends to do this by showing that the cases of brain cancer in both forms in his study are greater than the number of brain cancers found in an unexposed population. The mechanism for demonstrating this, under epidemiological principles, is the use of a Standard Incidence Ratio (S.I.R.). This is the ratio of observed cases to expected cases or O/E. (Neugebauer Report, p. 11).

Findings and Order of April 27, 2011, at p. 15, attached as Appendix "B".

Dr. Ginsberg, again, repeats his reliance upon Dr. Neugebauer's brain cancer cluster theory on page 4 of his Report.

> My central finding is that Mr. Branham's exposure to VC and related solvents while living in McCullom Lake Village for 36 years was a key contributing factor in the development of the glioblastoma multiforme he developed at age 63. This finding is based upon his exposure history (levels of exposure, length of exposure, latency period), the potency of VC to induce brain cancer, and the finding of a brain cancer cluster in this community of which Mr. Branham is a part.

Id.

The Expert goes on to rule out any potential random occurrence of the brain

tumor, citing the epidemiological support from the brain cancer cluster.

> However, the risk in the community still exists as exposure to mutagens such as VC leads to a long-term cancer risk as the latency period for the manifestation of the genetic damage and cancer unfolds. This concern is underscored by the recent discovery of a brain cancer cluster in McCullom Lake Village involving 20 cases related by target site and historical exposure to VC from pollution emanating from the Ringwood industries. It is not a coincidence that we have evidence of a brain cancer cluster in a community in which elevated VC exposure took place in the past.

Id. pp. 7-8.

Again, in his Report, Dr. Ginsberg reiterates the language of the Epidemiologist as finding that the brain cancer cluster is a "signal" (evidence) of a link between exposure and occurrence.

> Therefore, the brain tumor cluster found in McCullom Lake Village and surrounding environs is a signal that this community is at elevated risk from historic exposures to VC released from the Ringwood facilities and transported in a southerly direction.

Id. at p. 8.

Again on page 10 of the instant Report, Dr. Ginsberg relies generally upon epidemiological evidence of vinyl chloride's potential for brain cancer in animals as somehow being supportive for the notion that there is a similar risk for humans.

> With regards to vinyl chloride, the epidemiological evidence for brain cancer is stronger than for acrylonitrile so that, once again, one would have to consider the animal brain cancer evidence as being relevant to human risk.

Id. at 10-11.

The exposure that Mr. Branham may have encountered is framed in the level of risk associated with such exposure. This risk is not associated directly with the potential for this form of brain cancer in the Plaintiff but with the potential to form a brain cancer cluster. This is the link to Dr. Neugebauer's now discredited epidemiology that supports Dr. Ginsberg's theory of causation.

> VC is a potent low dose mutagen and carcinogen for which there is likely no threshold for its carcinogenic action. Therefore, any increase in VC exposure, no matter how

> small, adds a degree of risk for brain cancer. This becomes especially significant and has the potential to lead to a cluster of brain cancer when the VC exposure is above what can be considered normal background.

Id. at p. 36.

If there was any doubt that Dr. Ginsberg's theoretical basis for his causational conclusion was premised upon the need for a significant epidemiological calculation, his "conclusion" to his lengthy report serves to evaporate such doubt.

> Mr. Branham's exposure profile, risk factors and medical outcome are combined with the epidemiologic evidence that his cancer is part of a brain cancer cluster in this community. This indicates that Mr. Branham's brain cancer was caused by an environmental factor common to this portion of McHenry County, that being the airborne exposure to elevated concentrations of VC stemming from the Ringwood facilities.

Id. at p. 38.

Restated more succinctly, because Mr. Branham is a member of a community which has evidenced an outbreak of brain cancer (cluster) and the suspected exposure is environmental, then the environmental exposure caused the cancer in the community of which he is a member.

This is the reason why Dr. Ginsberg's opinion as to causation fails as a matter of fact and law as having the potential to establish causation.

The remaining issue on appeal, not specifically or implicitly addressed is in Number 9 of Plaintiff 's Statement of Errors.

This issue was addressed in this Court's Findings and Order of February 16, 2010, as set out below in relevant part.

The remaining claim is brought under a theory of Strict Liability. In order to sustain this claim, Plaintiff has to satisfy the requirements of Sections 519 and 520 of the Restatement (Second) of Torts (Restatement). (Citations omitted). One of the requirements under these Sections of the Restatement is to determine if an activity is abnormally dangerous. As a predicate to this analysis, the specific activity that is under scrutiny must be identified. Here, the activity of Defendant was the shortage of liquid waste in an open lagoon situated on Defendant's property, adjacent to Defendant's plant. The offered evidence does not support any claim that the storage of the waste was

abnormally dangerous. Plaintiff complains that the leaking of the waste and subsequent infiltration of the aquifer and release into the atmosphere was abnormally dangerous to the community. The necessary implication of this is that the storage facility was negligently maintained, of which the converse is that if the storage facility had been non-negligently maintained, there would have been no release into or infiltration of the surroundings. Under the Restatement, this negates the claim that the activity was abnormally dangerous. This analysis is consistent with the approach used in *Smith v. Weaver,* 445 Pa. Super. 461, 665 A.2d 1215 (1995) and *Melso v. Sun Pipe Line Co.*, 394 Pa. Super. 578; 576 A.2d 999 (1990).

Therefore, considering the instant Opinion which incorporates Appendices "A" and "B" and the Record as a whole, this Court's decision to grant an Involuntary Nonsuit should be affirmed.

BY THE COURT:

Jan 18, 2012
DATE

ALLAN L. TERESHKO, J.

cc:
All Counsel
Aaron J. Freiwald, Esq./Glenn A. Ellis, Esq.,/Katherine Robinson, Esq. for Appellant
Samuel W. Silver, Esq., for Appellees

APPENDIX "A"

THE FIRST JUDICIAL DISTRICT OF PENNSYLVANIA, PHILADELPHIA COUNTY

IN THE COURT OF COMMON PLEAS

BRANHAM, et al.	: **TRIAL DIVISION- CIVIL**
	: **MAY TERM, 2006**
vs.	: **No. 3590 (Lead Case)**
	:
	:
ROHM & HAAS CO., ET AL.	:
	: **Control# 09032327**
	: **Defendants Motion in Limine**
	: **to Exclude all Opinions by**
	: **Plaintiffs' Experts Related**
	: **to Causation**

Braham Vs Rohm&Haas Co -ORDER

FINDINGS and ORDER

The matter now before this Court is Defendants, Rohm & Haas Co., et al's Motion in Limine to Exclude all of Plaintiffs' Experts, related to Causation, under Control # 09032092.

These Motions are filed in the consolidated cases now before this Court with the Lead Case identified under the *Branham* caption above. These cases are part of a larger contingent of cases also before this Court under individual captions, but for these purposes, are referred to as the Rohm & Haas litigation.

The facts do not bear repeating, as this has been done extensively in various Motions and Pleadings readily accessible.

The Defendants seek to preclude Plaintiffs' Experts who are offered to support Plaintiffs' claims that the release of certain chemical waste products by Defendant ultimately migrated to the Plaintiffs' community and were absorbed by Plaintiffs, resulting in the numerous brain tumors of the Plaintiffs.

Defendants' Motion seeks to preclude Dr. Sidney D. Finkelstein, a Neuropathologist; Dr. Gary Ginsberg, a Toxicologist; and Dr. Richard Neugebauer, an Epidemiologist.

The gravamen of Defendants' objections to these Experts is encapsulated in the

following Paragraph which is repeated for each Expert:

> Rohm and Haas moves to exclude Dr. Ginsberg's opinion and testimony because his opinion does not meet any of the requirements of Rule 702, including the test articulated in *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923), that is incorporated in the Rule. Among other things, Dr. Ginsberg's methodology is not generally accepted by the relevant scientific community, his opinion is speculative and does not have an adequate basis in fact, and he has not stated his opinion with a reasonable degree of professional certainty.

Defendants' Motion in Limine to Preclude, para. 22, 27 and 32.

On September 30, 2009, this Court heard Oral Argument limited to "the issues raised in the Motion going to the admissibility of the testing of Epidemiologist, Richard Neugebauer and Neuropathologist, Sidney Finkelstein." (See Order of September 21, 2009).

Because this Court did not see the need for Oral Argument on Dr. Ginsberg's Report and Opinion, the basis for this decision will be explained below.

Dr. Ginsberg is a Toxicologist by profession. He is the senior Toxicologist for the Connecticut Department of Public Health where he has worked for fifteen (15) years. Dr. Ginsberg's conclusions were summarized in the last paragraph of his report, parts of which are set forth below:

> Cancer causation is multi-factorial, with a variety of host and environmental factors able to contribute to cancer risk. Background rates of brain cancer in the general population are appreciable, approximately 1 in 10,000. Vinyl chloride (VC) is likely a contributor to this background rate as there are low levels of this brain carcinogen distributed in outdoor air across the country. The increased exposure to VC during Mr. Branham's period of residence in McCullom Lake Village was a cancer-inducing factor that was compounded by co-exposure to other chlorinated solvents from the Ringwood facilities and co-exposure to alcohol and cigarettes. Mr. Branham's exposure to VC is estimated to be 29 fold above typical background concentrations and 7.7 fold greater than the USEPA de minimus risk level for a period of 36 years.
> Mr. Branham's exposure profile, risk factors and medical outcome are combined with the epidemiologic evidence that his cancer is part of a brain cancer cluster in this community. This indicates that Mr. Branham's brain cancer was caused by an environmental factor common to this portion of McHenry County, that being the airborne exposure to elevated concentrations of VC stemming from

> the Ringwood facilities. Therefore, my toxicological assessment finds that there exists reasonable scientific certainty that environmental exposure to VC was a significant contributing cause to the diagnosis of brain cancer in Franklin Branham.

Report of Ginsberg, Exhibit 2, Defendants' Motion to Exclude, pp. 37-38.

A brief discussion of how Dr. Ginsberg arrived at his conclusion ensues.

As a structure for assessing the challenged methodology, this Court will view what it considers the elements that must be present to support the expert's conclusions and the logical scientific infrastructure relied upon. The elements considered in due course will be: *Injury, Cause of Injury, Delivery Mechanism of Toxin, Exposure to Toxin and Source of Toxin.* (Unless otherwise specified, all information is from the Ginsberg Expert Report. Internal citations are omitted).

Injury: Mr. Branham was diagnosed with glioblastome multiform brain cancer in 2004. He was a resident of McCullom Lake Village, a small town south of the Ringwood facility of Defendant. His cancer was part of a number of other similar brain cancer diagnoses within this same community. Because of the existence of other like brain cancers in a small geographical area, an environmental source was considered. The methodology involved in this was to simply count the number of certain brain cancers in this community. The numbers and types are not contested.

Cause of Injury: In analyzing the potential source of Plaintiff's injury, the expert revived certain information which was available to him from existing sources and assumed certain facts derived from this information. The existence of a brain carcinogen in the form of vinyl chloride was assumed both from the company's records of the products being dumped into the storage lagoon of Defendants and from other studies showing such to be a suspected carcinogen.

The expert next analyzed the potency of vinyl chloride (VC) and its specific properties which could enable it to overcome any physical obstacles to its absorption into the brain and its capability to produce mutagenic changes in brain cells, from normal to cancerous. The analysis incorporated various factors including a latency period, level of toxicity and compatibility with chemical receptors in the brain, and the characteristics of the VC molecule which would supply the necessary transference mechanism through the brain blood barrier.

Delivery Mechanism: The suspected carcinogen (VC), as noted, was present in the liquid by-product placed into the storage facility on Defendant's property (lagoon). The

product was considered in a liquid medium, which was capable of being ingested and inhaled as a result of gassing out of the liquid medium. The community in which Plaintiff resided was considered to be in the path of migration, via airborne or waterborne vehicles. The factors considered were geographic proximity, potential hydrogeologic transmission and potential atmospheric patterns.

Exposure: Plaintiff was a lifelong resident of a community situated in the suspected path of delivery of a toxin which was capable of being absorbed in and around the residence as a result of normal household activities which would be repeated on a daily basis. Certain assumptions were made about the availability of the toxin using the above activities in concert with other known or reasonably assumed biologic activities. The above is descriptive by necessity because of the many complex sub-issues and is presented herein to describe the logical process by which the expert conducted his analysis. The documents relied upon are amply annotated in his report. The documents are the type that are traditionally relied upon and are consistent with the literature which is available in this area of inquiry and appears to be within the mainstream of such literature. The analytical processes utilized are consistent with generally accepted procedures employed in this type of analysis.

Defendant does take issue with the expert's conclusions but fails to sustain its burden at this level to show that the procedures employed by this expert are other than those traditionally employed and accepted in the relevant scientific community.

Defendant also filed challenges to Plaintiffs' other experts as noted above. Oral Argument was allowed on these Motions as there appeared to be a degree of greater complexity than the challenge to Dr. Ginsberg.

Dr. Finkelstein is Plaintiff's neuropathology expert. His opinion supplied the necessary bridge between the alleged exposure to the VC toxin and the brain cancer injury. Defendant purports to criticize the manner (methodology) in which he arrived at his conclusion.

A brief review of his conclusions will set the backdrop for demonstrating this approach.

> Cancer formation is a unidirectional process where mutational change that confers advantage becomes fixed into altered cells causing them to overgrow and replace equivalent cells lack such acquired DNA damage. There is no mechanism available to cells to recover the DNA damage that has become permanently "fixed" into the affected cells. Cancer formation is a multistep process of

> serially acquired mutational damage leading to progressive increase in growth deregulation as the cells evolve from states of partial loss of growth control to total loss of growth regulation and then cancer spread from the primary site of formation.

Finkelstein Expert Report at p. 36. Exhibit 1 of Defendants' Motion to Exclude. (Hereinafter Finkelstein).

In order to determine the source of the mutational damage, the expert used an approach which employs microdissectional tissue samples and subjects same to microscopic analysis to determine if any molecular genetic changes are present on the subject DNA.

> Surgical pathologists, because they deal directly and are responsible for individual patient diagnosis, are always attuned to findings that impact on cancer causation. My approach, combining tissue microdissection according to microscopic and topographic cellular features with broad panel DNA structural change marker analysis, was developed not only to improve surgical pathology diagnosis but to enhance the understanding of the molecular genetic basis of cancer formation derived from clinical patient specimens.
>
> Some have stated that determination of the unique mutational signature of DNA damage for a brain cancer is not feasible and that it cannot be directly linked with chemical agent causation. This opinion is not supported by the majority in the medical scientific community and runs contrary to well established evidence proving the opposite. In fact, searching for and defining unique mutational signatures is an effective and useful technique that is increasingly being used in environmental oncology, molecular diagnostics and pharmacogenomics. Many chemical agents are known to induce a unique and predictable DNA signature of mutational damage that cannot be accounted for on the basis of sporadic or idiopathic (unknown) cancer causation.
>
> In fact, recent advances in genome wide systems of molecular analyses and broad panel mutational analyses has repeatedly affirmed that chemical agents can be associated with specific forms of DNA damage that cannot be accounted for in other ways. It is the role of the pathologist to contribute objective, unbiased information on DNA signature changes derived from tissue specimens.

Finkelstein, at p.8.

In coming to his conclusions, the expert assumed that the type of mutational damage from toxic sources differed from sporadic (naturally occurring) mutational

damage.

> It has been reported that unique patterns of DNA mutational damage can be specifically attributed to chlorinated solvent exposure (9-12). For example, in a matched cohort of subjects with renal cell carcinoma (RCC), having workplace exposure to chlorinated solvents, and unexposed subjects a high frequency of von-Hippel Lindau gene mutations at chromosome 3 were found. Unlike VHL gene alterations that occur in sporadic RCC, the frequency of VHL mutations in workplace associated RCC was significantly higher, tended to be multiple and affected a hot spot region of the distal part of the first exon of the gene. Using these differential DNA based molecular alterations, a molecular pathologist is capable of discriminating between workplace and non-workplace associated RCC.

Finkelstein at p. 14.

The expert also considered what he believed to be supporting data for the increased volume of mutational changes (greater cumulative load) which appeared to be present in genotoxic induced cancer vs. sporadic (naturally occurring) cancer.

> In these studies on subjects exposed to chlorinated solvents, an additional observation that was noted was the finding of multiple DNA sequence mutations affecting the VHL gene. In sporadic RCC, VHL gene point mutations are present in approximately 50% of cases and when it is present, only a single DNA sequence is found. In chlorinated solvent induced RCC, the VHL gene DNA sequence mutations are acquired in the vast majority of subjects and frequently more than a single VHL DNA sequence is present. This observation supports a mechanism of mutational damage that is supported strongly by peer review literature that genotoxic induced human cancer differs from sporadic cancer formation by virtue of a greater cumulative load of acquired mutational damage. With chlorinated solvents causing multiple VHL gene mutations, it is reasonable to confirm genotoxic causation of cancer by searching for additional mutational damage on chromosome 3 which contains VHL gene on chromosome arm 3p. We did this by creating a panel of LOH markers distributed across chromosome 3.
>
> Chromosome 3 mutational damage, and in particular mutational change on chromosome arm 3q, is uncommonly acquired in sporadic glioma formation. It is reasonable then to affirm a causal relationship between exposure to chlorinated solvents and glioma formation in multiple chromosome 3 LOH alterations are demonstrated in potentially exposed subjects. In a similar way, we reviewed the peer review literature and found that chromosome 12

> LOH, and in particular chromosome 12q LOH, are rarely acquired in sporadic brain cancer formation. It is likely that genotoxic injury would not discriminate between difference chromosomal regions to induce DNA damage, thus we extended the analysis to chromosome 12 to determine if that chromosome, rarely affected in sporadic glioma formation, has been subject to LOH in the subjects evaluated here.

Finkelstein, pp. 14-15.

The above is but a snippet of the analysis conducted by Dr. Finkelstein but is presented because it captures the scientific approach utilized. The same approach was utilized for the eight (8) Plaintiffs (including Mr. Branham) named as part of this consolidated action.

The repetition of the observed mutagenic changes in the Plaintiffs' under study, were perceived as supporting his assumption that the source was something that the group was exposed to from environmental sources.

> Based on the above I have reached the following opinions which I hold to a reasonable degree of neuropathological and scientific certainty:
>
> 1. The pattern of chromosome 3 allelic imbalance (LOH) damage I have found in brain cancer tissue from the eight (8) plaintiffs who are former and current residents of the McCullom Lake area, is distinctly different than that observed in cases of sporadic brain tumors examined in this laboratory and found in the peer reviewed literature.
> 2. The pattern of chromosome 12 allelic imbalance (LOH) damage I have found in brain cancer tissue from the eight (8) plaintiffs who are former and current residents of the McCullom Lake area, is distinctly different than that observed in cases of sporadic brain tumors examined in this laboratory and found in the peer reviewed literature.
> 3. Since the peer-reviewed literature reports that chromosome 3 and chromosome 12 deletions in sporadic brain cancers are uncommon, it is my opinion that these eight tumors were not sporadic but were environmentally caused.
> 4. Based on the peer reviewed literature and my years of experience it is my opinion that the degree and repeated pattern of chromosome 3 and 12 deletions seen in these eight individuals examined is consistent with exposure to the same genotoxic chemicals, specifically chlorinated solvents and their degradation products.

Finkelstein at p. 6.

Using the above science as a basis for his opinion, the expert further concluded:

> We have shown, using the brain cancer tissues of the above individuals, that in each tumor, there was extensive chromosome 3 and 12 mutational damage which cannot be attributed to sporadic brain cancer formation but which can be causally associated with chlorinated solvent exposure and/or their degradation products exposure.
> Both chromosome 3 and 12 mutational damage is distinctly uncommon in human brain cancer. Multiple mutations affecting these chromosomes are rare. Also, chromosome 3 and 12 mutations are not described as contributing to the early events leading to brain tumor formation. Six patients were evaluated here with one subject having three separate chromosome 3 mutations, three subjects having four chromosome 3 mutations, one subject had five chromosome 3 mutations and a sixth subject had 6 mutations. This unique mutational DNA signature of DNA damage indicates that these brain cancers were not sporadic but share a common etiology of exposure. The seventh patient with liver cirrhosis showed mitochondrial DNA mutational damage further in keeping with chlorinated solvent exposure and/or their degradation products exposure. Based upon these findings I can state, to a reasonable degree of medical certainty, that brain cancer formation and liver cirrhosis in these subjects, were due to exposure to a chlorinated solvent exposure and/or their degradation products and that the brain cancer and liver cirrhosis was not due to sporadic causation.

Finkelstein at p. 36.

The objections of Defendant regarding the scientific methodology are misplaced as the general approach to this scientific inquiry is frequently employed by other cancer research scientists.

This is amply demonstrated in Plaintiff's Answer to the instant Motion documenting the use of this methodology by Defendant's experts.

The following are excerpts from deposition testimony by Defendant's experts in other similar litigation. The citations are from Plaintiff's Answer to the instant Motion, (Answer):

> Q. Dr. Louis, in reviewing your CV, you indicate that your lab has used genetic analysis to study brain tumors. I know it's a very general, big picture statement, but is that true?
> A. Yes.
> Q. Let me just try and get that increasingly more specific. You have, in your experience, used genetic analysis to identify and classify brain tumors, correct?
> A. Yes.

Q. And the use of genetic analysis as a neuropathologist would do, is that a generally accepted approach to the study of brain tumors generally and to the identifying and classifying of brain tumors?
A. I'm sorry. I didn't understand the question.
Q. The work that you've done using genetic analysis to study brain tumors, is that a generally accepted approach in the field of neuropathology?
A. It's a generally accepted in the area of brain tumor research. The research that I carry out is in addition to my role as a neuropathologist.
Q. I'm just trying to understand your answer. Are you answering that way because there are others besides neuropathologists who involve themselves in this type of research?
A. That's correct, yes.

Answer. p. 36.

Q. And the use is really what I was trying to get to. The use of genetic analysis is a generally accepted approach for those purposes?
A. When it's based on a reasonable literature to say that there is a role in a particular clinical situation for genetic analysis.
Q. Well, respectfully, I think you're jumping ahead of me a little bit, because now you're bringing in interpretation. Let me first start with the scientific approach, if you will, and then I'll separately ask you about interpretation. Is the use of genetic analysis an appropriate and widely accepted scientific approach to the study of brain tumors?
A. Yes.

Answer. p. 37.

Q. And, again, I'm going to spend some time reviewing your comments about Dr. Finkelstein's findings, but let me leave that to the side until we get there and just for the moment stay with the approach.

If I understand it, your testimony this morning was that Dr. Finkelstein's findings are OK. And I know you have issues with his interpretation of those findings, but just on the subject of the findings themselves. He finds five regions of allelic damage in chromosome 3 and there's some findings regarding chromosome 12. The methodological approach Dr Finkelstein employed to produce these findings, I take it you don't have any criticism about that methodological approach?
A. That's correct.

Answer. p. 38.

Q. Did you perform any genetic analysis of Dr. Lange's tissue?
A. No.
Q. Do you have that capability in your lab?
A. Yes.
Q. Have you, yourself, done that type of analysis in the past?
A. What type of analysis?
Q. Genetic analysis.
A. Yes.
Q. Have you done the type of genetic analysis that looks for allelic losses [also known as LOH] in particular chromosomes of brain tissue?
A. Yes.

Answer. p. 39.

As further support for Plaintiff's argument that the analysis used by their experts is generally accepted by the relevant scientific community, Plaintiff points to the inclusion and recognition of this analysis in a widely recognized text on pathology in which Defendant's expert serves as a general editor of the text.

> Further evidence that Dr. Finkelstein's methodology is generally accepted and widely used comes from another aspect of Dr. Louis' work. Dr. Louis served as one of the general editors of the textbook, Greenfield's Pathology, 8th Edition (2008) and specifically edited Chapter 23, in Volume 2, which discusses brain tumors. In the section on glioblastoma, beginning at page 1846 of the text, Dr. Louis reviews the scientific literature on the molecular genetics of this form of malignant brain cancer. All of the journal articles Dr. Louis reviewed in this section of his text employed molecular/genetic analysis to identify specific DNA locations of LOH, that is, cell damage, just as Dr. Finkelstein did in the McCullom Lake cases. A copy of Dr. Louis' book chapter is attached as Exhibit K.

Answer at p. 40.

After reading the above referred to Chapter, it is obvious that it does not specifically include the analysis that Dr. Finkelstein did, focusing on the mutational changes to chromosomes 3 and 12 and the alleged relationship to the VC induced brain cancer, but does focus on the presence of chromosome damage occurring in brain cancer cases.

This is the critical point and one which is repeated by Plaintiff. The methodology of looking for genetic damage is one which is utilized in brain cancer pathology and appears to be used in the general community and accepted as a means of determining how

a healthy tissue cell becomes a cancerous cell. The apparent dispute is how one uses and interprets the data. This is not a *Frye* issue, this is a trial issue. (Citations omitted).

The next and last piece of the Motion now under consideration by this Court concerns the Report of Plaintiff's Expert, Dr. Neugebauer, who offered an opinion on the cause of Plaintiff's cancerous brain tumor.

In arriving at his conclusion, the Expert utilized the science of Epidemiology and applied it to the facts in the instant case to produce what he believes to be a statistical probability that Defendants' toxins were responsible for Plaintiff's damages.

To facilitate the below discussions, citations are omitted because the principles referred to are broad and not seriously contested.

Epidemiology attempts to study the factors which affect the health or illness of a population. In its basic iteration, it looks at the incidence of an illness in a population which may be exposed to certain health factors and then compares this to a population which was not exposed to these same health factors to determine if the same incidence of illness is present, thus ruling out the exposure as a cause of the illness.

The convention used for expressing the results of such studies is in numerical form which generally shows the product of a calculation of a ratio. The math is straight forward. The numbers producing the ratio are derived from determining the number of actual cases of <u>observed</u> injury in a defined exposed population. The other number is derived from determining the number of cases of the same injury in a non-exposed population. Another way of stating this is the number of like injuries which are <u>expected</u> to occur naturally (sans exposure).

The standard for expressing this relationship is with a ratio of observed cases divided by expected cases or O/E. Simple examples of such expressions are:

1. Observed Cases 20 Expected Cases 4 = 20/4 = 5
2. Observed Cases 8 Expected Cases 8 = 8/8 = 1
3. Observed Cases 4 Expected Cases 8 = 4/8 = .5

Translation:

Ex.1 500% more cases than expected

Ex.2 No increase-same observed as expected

Ex.3 50% less observed cases to expected cases

This is not black box science.[1]

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1. Generic reference to any science where the inner workings are hidden. (Citations omitted).

This is what the Expert did here. He used two different, but overlapping methods of conducting his analysis, both of which are recognized as standard, generally accepted methodology.

Ecologic study- The design study is simple and straightforward.

> This design involves comparing the number of litigants (cases) with each brain cancer subtype (oligodendroglioma and glioblastoma) among persons exposed to the environmental contaminants with the number of cases of each brain cancer subtype *expected* in the exposed population. The expected number of cases is derived from publicly available data produced by state-wide US cancer registries. The ratio of observed cases to expected number of cases is used to compute the SIR. In order to be included as an observed case in the analyses an individual had to have been diagnosed with one of the above types of brain cancer while they either lived or worked in the target area.

Neugebauer Expert Report at p. 7. Exhibit 3 to Defendants' Motion

The situs of the study involved four separate geographic areas which bore distinct relationships to the Defendant's Ringwood facility. The areas were broadly defined in Area 1 and resolved into smaller and more precise areas configured to the type of exposure assumed, based upon the reports of other Plaintiffs' Expert. (E.g. atmospheric and groundwater contamination).

These four areas would provide the population data base for calculating the number of <u>expected</u> cases of the type of brain cancer.

The other relevant aspect of the study was to determine the actual[2] number of reported cases of injury within the exposed population. This is the <u>observed</u> component of the ratio. The actual calculation was more complex as it contained increasing levels of refinement but the underlying methodology of determining the critical ratio was the same methodology employed in most epidemiologic studies.

Defendants' argument essentially attacks the various data points used by the Plaintiffs' Expert in arriving at his conclusions.

For example, Defendant identifies the four separate geographic areas that Plaintiff's Expert uses and argues that there were overlapping areas and that a cancer case counted in Area 4 was also counted in other areas because of the overlap. While this may

---

2. Since the number is the number of cases in litigation, it would not be unreasonable to assume that this is a lower number than actually occurring because of human behavior. (See Plaintiff's Memorandum for further explanation). If true, this would lower the <u>observed</u> number of the ratio.

be so, Defendant does not support its claim that this is not acceptable methodology because it is clear that Plaintiffs' Expert uses different data points, representing a separately calculated expected number of cancer cases based upon the population of each defined area. This is clearly represented by the chart Defendant uses in its Motion.

AREA 1		AREA 2	
Oligodendrogliomas	Glioblastomas	Oligodendrogliomas	Glioblastomas
Observed: 3 —Freund —Milliman —Weisenberger	Observed: 4 —Stepp —Mass —Roszak —Wierschke	Observed: 2 —Freund —Milliman	Observed: 4 —Stepp —Mass —Roszak —Wierschke
Expected: 0.74 SIR: 4.06 Claimed statistical significance? — Yes	Expected: 6.57 SIR: 0.61 Claimed statistical significance? — No	Expected: 0.12 SIR: 9.45 Claimed statistical significance? — Yes	Expected: 1.47 SIR: 2.72 Claimed statistical significance? — No

AREA 3		AREA 4	
Oligodendrogliomas	Glioblastomas	Oligodendrogliomas	Glioblastomas
Observed: 2 —Freund —Milliman	Observed: 4 —Mass —Stepp —Weisheit —Wierschke	Observed: 2 —Freund —Milliman	Observed: 2 —Stepp —Mass
Expected: 0.135 SIR: 14.81 Claimed statistical significance? — Yes	Expected: 0.94 SIR: 4.26 Claimed statistical significance? — Yes	Expected: 0.012 SIR: 166.67 Claimed statistical significance? — Yes	Expected: 0.095 SIR: 21.05 Claimed statistical significance? — Yes

This is consistent with accepted methodology as the SIR (Standardized Incidence Ratio) is different for each of the four represented areas because a O (Observed cases) changes the number of E (Expected cases), changes based upon the inherent variable of the sector population. This is logically and methodologically consistent.

Defendant also argues that the inclusion of reported cases of persons who worked but did not reside in certain areas fault the methodology. Clearly, it does not, because the inclusion or lack thereof is based upon individual factual issues which are not of the type that this Court can resolve in a *Frye* analysis.

Defendants' other criticisms again, do not go to the methodology but to the data points used.

The choice of an observational period for which an accounting is made regarding the hours a person is exposed over the course of time, is a method of determining the denomination or the number of expected cases of cancer in a given time set. The larger the time period would arguably result in a larger denomination in the O/E ratio. Therefore, Defendant says Plaintiff restricted the denomination. This does not invalidate the ratio which is the acceptable methodology, but does argue that the factual basis for deciding what time period is appropriate is an issue for the fact finder to resolve.

Defendant also advances the obverse of the above argument when it says that by including full time employees in the designated areas, it inflated the denomination. This apparent anomaly serves to confirm that the argument concerns not the methodology but the data input which has been repeated here, is the province of the fact finder.

Therefore, considering the above and the record as a whole, Defendants' Motion to Preclude related to Causation is Denied.

BY THE COURT:

ALLAN L. TERESHKO, J.

Nov 17th 2009
DATE

cc:

Dennis R. Suplee, Esq.
Aaron J. Freiwald, Esq.

APPENDIX "B"

THE FIRST JUDICIAL DISTRICT OF PENNSYLVANIA, PHILADELPHIA COUNTY

IN THE COURT OF COMMON PLEAS

BRANHAM	: TRIAL DIVISION-CIVIL
	:
VS.	: MAY TERM, 2006
	: NO. 3590 (LEAD CASE)
ROHM and HAAS CO., et al.	:
	:

FINDINGS and ORDER

On September 20th, 2010, this Court began the Trial of this matter with a jury empanelled. The Trial was to last between ten to fourteen weeks. During the first five weeks, Plaintiff presented mostly Expert witnesses on the issues of groundwater flow and the volume of the vinyl chloride allegedly released into the environment in order to create a source for the allegedly toxic contaminant and a mechanism to deliver this to the Plaintiff's now deceased husband.

Interspersed between these Experts were two Causation Experts who were to establish the critical links between exposure to the vinyl chloride and the brain cancer of Mr. Branham.

The first of these Experts was Dr. Sidney Finkelstein. He was offered and accepted as an Expert in the area of pathology with a qualification in the subset of neuropathology. N.T. 10/4/2010, A.M. Session, pp. 41-42. Dr. Finkelstein was offered as an Expert in this field for the purpose of satisfying Plaintiff's burden of establishing specific causation of Mr. Branham's brain tumor.

> And, remember, His Honor has explained, and will explain again, the burden of proof and those scales, how they have to tip ever so slightly for the plaintiffs to meet the burden of proof.
>
> Ninety-five percent probability is far in excess of what we need to prove to win this case, and to prove that this is a cancer cluster, and that Mr. Branham is part of a large brain cancer cluster.

But we don't stop our proof with epidemiology.

We also will bring to you, to this witness stand the testimony of a neuropathologist. That's a pathologist who specializes in the brain.

And the pathologist, who will testify in this case, Dr. Finkelstein from Pittsburgh, took tissue from Mr. Branham's brain cancer.

And Dr. Finkelstein then compares that to what is known, what is written about, in individuals who have brain cancer but aren't exposed to anything that anybody knows about.

So he compares Mr. Branham's DNA profile, if you will, to the DNA profile of somebody who has an ordinarily occurring brain cancer.

And what Dr. Finkelstein finds is that the pattern of DNA damage in Mr. Branham's brain doesn't look like the pattern you see in brain cancers that occur ordinarily without exposure.

But he doesn't stop there.

He compared Mr. Branham's DNA damage to six other brain cancers – six other individuals from McCullom Lake who also had brain cancer.

He obtained their slides – just like the one we saw with Mr. Branham – ran it through the same analysis, and he compared them one to the other and finds remarkably that the pattern of DNA damage in this group of individuals from McCullom Lake looks similar to one another; different from what individuals who don't have exposure to chemicals might look like, but similar to each other.

And that similarity, he will tell you, is caused by chemical exposure; and, in particular, by vinyl chloride.

N.T. 9/20/2010, A.M. Session, pp.64-66.

As part of the research for preparing his Expert opinion on the specific Causation of the vinyl chloride molecule (VC), Dr. Finkelstein had cause to review the scientific literature involving a study of German workers who were exposed to trichloroethylene (TCE) in an occupational exposure as compared to an environmental exposure. (N.T. 10/4/10, P.M. Session, pp. 23-24). The Expert rationalized his use of these studies in this exchange.

Q. The scientific literature that you are referring to involves a study of German workers who were exposed to TCE; correct?

A. Yes.

Q. TCE is trichloroethylene?

A. Yes.

Q. The study had nothing to do with vinyl chloride;

correct?
A. Vinyl chloride and TCE are part of a group referred to as chlorinated solvents.
Q. The study that you are relying on for your opinions today, these German studies, looked specifically at TCE exposure; correct?
A. It's my understanding that they – it would take – I wouldn't be sure unless – I have to reread it and I have to defer to the toxicologist because I do understand that TCE can have breakdown products, and that workers like this are not always exposed to the single chemical.
Q. Doctor, I understand. But when you went to these studies and you read them, did you see any reference in those studies to vinyl chloride?
A I do not recall seeing a reference to vinyl chloride.
Q. Let's talk about those studies.
We'll call them the German studies or the TCE studies.
These TCE studies are the source of your theory that you can look at chromosome 3 and find evidence of chemically-induced chromosome damage?
A. It contributes to the work which led to me doing this type of analysis.

N.T. 10/4/2010, P.M. Session, pp. 23-24.

As part of the Expert's analysis, using these German studies, it was recognized that there were disparities between the methodologies employed in the instant vinyl chloride brain cancer analysis and the German Study, TCE analysis.

Q. Well – and you actually cite in your report four of those studies? Four of the German Studies?
A. Yes.
Q. Now, you already indicated that the study involved TCE exposure; right?
A. Yes. It describes TCE exposure.
Q. And it also involved not environmental exposures to TCE, but occupational exposures?
A. Yes.
Q. Workplace exposures; is that right?
A. Yes.
Q. Not only did the study involve workplace exposures to high levels of TCE, it also involved kidney cancer; correct?
A. Yes.

N.T. 10/4/2010, P.M. Session, pp. 24-25.

The issue of workplace exposure is a critical factor because the investigators in the German study used it as part of their methodology in determining whether there was a

causational link between exposure level and mutations in the VHL[1] gene under consideration. (N.T. 10/4/10, P.M. Session, p.26).

> Q. Now, what they are doing here, Doctor, is they are describing the exposure conditions that were in the background of the study; correct?
> A. Yes.
> Q. And what they are indicating is that the workers who were the subject of this study were manually handling liquid TRI, which means TCE, trichloroethylene?
> A. Yes.
> Q. It indicates that they were working. The work conditions included unprotected cleaning of metal parts in large open tubs filled with TRI or TCE?
> A. Yes.
> Q. That the workers would use the TRI for cleaning floors and clothes and even for cleaning the skin of their hands and arms; is that right?
> A. That's what it says.
> Q. And the estimated concentrations of the volatile TCE exceeded manifold the exposure threshold of 50 parts per million.
>
> Do you see that?
> A. Yes.
> Q. Now, they are using the quantity 50 parts per million. And they said it was more than 50 parts per million. And the jury is going to hear evidence that Mr. Branham's exposure estimate according to their expert is 1.23 micrograms per cubic meter which is 0.00048 parts per million. Now, that is hundreds of thousands of times, more than a hundred thousand times lower than the exposure level that was at issue in the German studies; correct?
> A. That is correct.
> Q. Do you see in this paragraph, Doctor, that the German researchers are analyzing their mutation results based on exposure level?
> A. Yes.
> Q. And what they report is that the mutations to the VHL gene "were detected in patients who had high and medium exposure levels but not in patients with a low exposure level."
>
> Do you see that?
> A. Yes.
> Q. And you were aware of that at the time you reviewed this study?
> A. Yes, I read this sentence.

---

1. (VonHippel-Lindau) This form of genetic mutation is found in people who suffer from renal cell carcinoma.

Q. Now, knowing that the German researchers had determined that the effect that they were observing did not appear in the low exposure level group. Did you take any steps in your analysis to account for variations in exposure level?
A. Yes. The exposure –
Q. The answer is "Yes?"
A. Did I take into account the exposure level?
Q. Yes. It's a yes or no. Either you did or you didn't.
A. Yes, I did.
Q. Did you – in your report is there anywhere where you set out the estimated exposure level of any of the people whose tissue you've analyzed?
A. No. I did not put the exposure level of the people.
Q. And you don't even indicate in your report, do you, that you even had estimates of the exposure levels of the people you're analyzing?
A. That's correct.

N.T. 10/4/2010, P.M. Session, pp. 41-45.

As part of Dr. Finkelstein's genetic mutation analysis, he relied upon certain studies to support his method of genetic mutation profiling.

> It has been reported that unique patterns of DNA mutational damage can be specifically attributed to chlorinated solvent exposure. (9-12) p.14 undated Finkelstein Report filed in this action. (Finkelstein Report)

The "(9-12)" reference is to the four German Studies found in the Reference Section of the same report at Points 9-12, p. 39, Id.

To initiate his methodology, Dr. Finkelstein looked at:

> . . .(a) matched cohort of subjects with renal cell carcinoma (RCC) having workplace exposure to chlorinated solvents p.14, Id.

Within this workplace exposed cohort, he found:

> a high frequency of VonHippel (VHL) Lindau gene mutations at chromosome 3 .... p.14, Id.

He found other characteristics of mutations in the workplace exposed subjects:

> Unlike VHL gene alterations that occur in sporadic RCC, the frequency of VHL mutations in workplace associated RCC was significantly higher, tended to be multiple and affected a hot spot region of the distal part of the first exam of the gene. p.14. Id.

After establishing his observations based upon the above-referred to German studies on workplace exposure, Dr. Finkelstein then goes on to restate the differences between sporadic (naturally occurring) RCC and "chlorinated solvent induced RCC."

In this statement set forth below, this Court notes well and with reason that the Doctor has made a linguistic and methodological transformation from workplace exposure involving doses hundreds of thousands times greater than that experienced by the McCullom Lake parties to a vaguely referenced, amorphic "exposure" to chlorinated solvents.

> In these studies on subjects exposed to chlorinated solvents, an additional observation that was noted was the finding of multiple DNA sequence mutations affecting the VHL gene. In sporadic RCC, VHL gene point mutations are present in approximately 50% of cases and when it is present, only a single DNA sequence is found. In chlorinated solvent induced RCC, the VHL gene DNA sequence mutations are acquired in the vast majority of subjects and frequently more than a single VHL DNA sequence is present. p.14 Id.

This same transformation of methodology from significant workplace exposure analysis to an "observation" of generalized "mechanisms of mutational damage" next occurs.

> This observation supports a mechanisms of mutational damage that is supported strongly by peer review literature that genotoxic induced human cancer differs from sporadic cancer formation by virtue of a greater cumulative load of acquired mutational damage. p. 14 Id.

In the following passage, any connection to the original premise of the studies relied upon (high workplace exposure) now becomes obliterated and a new conclusion arises which states that some unspecified exposure to chlorinated solvents are now capable of causing genotoxic cancer.

> With chlorinated solvents causing multiple VHL gene mutations, it is reasonable to confirm genotoxic causation of cancer by searching for additional mutational damage on chromosome 3 which contains the VHL gene on chromosome arm 3p.

The next transformation occurs when the premise is again modified to conclude that:

> Chromosome 3 mutational damage, and in particular mutational change on chromosome arm 3q, is uncommonly acquired in sporadic glioma formation. It is reasonable then to affirm a causal relationship between exposure to

> chlorinated solvents and glioma formation in multiple chromosome 3 LOH alterations are demonstrated in potentially exposed subjects. p.14 Id.

When the above passages are reduced to their essence and obfuscating sometimes misleading language is removed, this Expert, Dr. Finkelstein, has created an unsupported logical construct which for simplicity, is summarized as follows:

1. He began using, as a premise for his methodological approach, the conclusions developed from the German studies which established very high dose workplace exposure to the TCE chemical resulted in an increase in liver cancer (RCC) which was evidenced by mutation of the VHL gene on chromosome 3.

2. He then went on to speculate that since TCE is a chlorinated solvent, and the VHL gene was on chromosome 3, than any mutations on chromosome 3 were the result of some exposure to chlorinated solvents.

3. He advanced his speculation by assuming that since there are mutations on chromosome 3 then there is a causal relationship between exposure to chlorinated solvents and glial formations, (gliomal type brain cancer), because it is uncommon to find chromosome 3 mutations in sporadic (naturally occurring) glial formations, (glioma brain cancers as we have here).

This speculation is factually and legally barren of any support in the Record before this Court.

Dr. Finkelstein relied upon this approach when he testified on direct examination during this Trial.

> Q. All right. And so on the basis of the analysis that you did, the individual analysis of Mr. Branham's brain cancer and the cohort analysis looking at the other individuals whose tissue you examined, were you able to reach an opinion to a reasonable degree of medical certainty as to whether Mr. Branham's brain cancer was sporadic or ordinarily occurring?
> A. It was not sporadic. I concluded that Mr. Branham's tumor was not a sporadic brain tumor.
> Q. Did you reach an opinion as to whether Mr. Branham's brain cancer on the basis of all the analysis you described was attributable to chlorinated solvent exposure; namely, in this case vinyl chloride?
> A. Yes, I did. And I felt so that it was causally related to chlorinated solvent exposure because it falls outside of the range which can be considered for sporadic brain cancer.

N.T. 10/4/2010, P.M. Session, pp.15-16.

The vacuous nature of Dr. Finkelstein's theory of causation was revealed during the course of cross-examination in this Trial when he retracted any statement about specific causation of vinyl chloride and in doing so, effectively recanted his theory of causation by failing to opine in a legally competent manner that the vinyl chloride exposure caused the Plaintiff's brain cancer.

> Q. Now, several times in response to the questions from Mr. Freiwald you mentioned vinyl chloride.
> Do you recall that?
> A. Yes.
> Q. Doctor, vinyl chloride is nowhere mentioned in your report; correct?
> A. If it is not mentioned, then it is not there.
> Q. You don't recall using the word vinyl chloride anywhere in your report?
> A. I would have to read it to be sure. I don't recall whether I used that word.
> Q. Nowhere in your report do you state that vinyl chloride is responsible for Mr. Branham's cancer; correct?
> A. I don't say that. But on the other hand, I do saythat–
> Q. Doctor –
> MR. VAN WART: I move to strike.
> MR. FREIWALD: This is misleading – I object, Your Honor.
> MR. VAN WART: My question is very specific.
> MR. FREIWALD: But it is in the report.
> THE COURT: What is in the report?
> MR. FREIWALD: Vinyl chloride.
> MR. VAN WART: My question is very specific.
> THE COURT: The question was fairly specific. Can you answer the question?
> THE WITNESS: I would like to be accurate. I was asked whether I used the word vinyl chloride. I certainly made the point that the tumor –
> THE COURT: No, just answer the question. Did you use the word "vinyl chloride"?
> THE WITNESS: I don't know if it would be accurate, I may have used it. But I'm not sure.

N.T. 10/4/2010, P.M. Session, pp. 21-22.

> Q. Doctor, is there any statement in your report thatvinyl chloride, specifically vinyl chloride, caused Mr. Branham's brain cancer?
> A. Without rereading the report, I have no recollection. I would have to say no. But I would like to reread it to be

accurate.
N.T. 10/4/2010, P.M. Session, p.22.

BY MR. VAN WART:
"QUESTION: Would you agree that within the epidemiological literature regarding brain cancer and its causes, that the only scientifically and medically-accepted environmental cause of brain cancer is ionizing or therapeutic radiation?"
"ANSWER: I have heard.

I have – the way you phrase that does remind me of things that I have read, so I think that is – that is probably a true statement.

On the other hand, there's a lot we don't know about cancer. Things can change over time. Things evolve. And I can't remember whether I read that in that older literature. Is that newer literature?"

Were you asked that question, and did you give that answer?
A. I did.

But, as you can see, I'm not someone who really focuses on toxic exposure and epidemiology.
Q. Now, when you're looking at the exposure that you understand from somebody else occurred, you are actually not able to distinguish what specific chemical or agent caused this pattern that you say you've observed?
A. Yes.
Q. You cannot?
A. I cannot.
Q. And it's your position that anything that is genotoxic that somebody was exposed to could have caused it?
A. Yes.
Q. And you have not, as part of your investigation, tried to determine what other types of things people might have been exposed to to see if that could account for the pattern that you have presented here?
A. That's correct.

That's not work which I do, but which I would think other would do in this case.
Q. So virtually anything in their background experience that is chemical or genotoxic could have caused the pattern that you observed in these people?
A. That's correct.
Q. And you are not able to say at any particular given case what the specific chemical was, if any, that caused that pattern?
A. That's correct.

Again, I would – I would expect others, as part of a team, to contribute that information.

Q. Right.

But in terms of the mutational analysis that you presented, you cannot say as to any specific individual what the exposure was that caused it in a particular individual?

A. Yes, that's correct.

N.T. 10/5/2010, A.M. Session, pp. 77-79.

When assessing legal competency of a scientific opinion within a *Frye* framework, we are guided by our Appellate Courts in the factors we are to consider. The foremost of these is the general acceptability of the proponent's methodology in the relevant scientific community (citation omitted). Such a test presupposes that a scientific methodology exists in some form, that some level of scrutiny could be undertaken. No such methodology exists in Dr. Finkelstein's opinion. What attempts to pass as methodology was revealed during his testimony in this trial to be a quantum leap[2] from the study of mutations on a chromosome in one set of circumstances, (high dose exposure to TCE resulting in liver cancer) to these same or similar mutations now causing brain cancer in extremely low dose exposure from a different chemical (VC).

The scientific path between the two was never shown; ergo no methodology has been shown.

Assuming arguendo, that Dr. Finkelstein's methodology was legally recognizable, he than must show that there was a legally competent causal relationship between the exposure to vinyl chloride and this brain cancer.

This requirement was explained in *Vorbnoff v. Mesta Machine Co., et al.* 286 Pa. 199; 133 A.256; 1926 Pa. Lexis 528 (1926).

> For an example of what is meant by "legally competent evidence," if the controlling question in this case, namely, as to the fact of the alleged accident, was established in claimant's favor, the next question would concern its harmful results, and, in this regard, the law would require him to show that the accident was responsible for his impaired physical condition; if he depended upon expert medical testimony for that purpose . . .
>
> That is to say, the witness would have to testify, not that the condition of claimant might have, or even probably

2. An abrupt discontinuous change in method, information or knowledge. *The freedictionary.com*

> die, come from the accident, but that "in his professional opinion the result in question came from the cause alleged"; for, according to our latest pronouncement on this subject, a less direct expression of opinion would fall below the required standard of proof, and therefore would not constitute legally competent evidence. Id.

This requirement is well founded in logic and in law.

An expert, who is allowed to testify as to a causal relationship between an event and the injury it is alleged to have caused, holds a unique position in our system of jurisprudence. This is because the expert has the power to transform an opinion into a fact.

> The issue is not merely semantics. There is a logical reason for the rule. The opinion of a medical expert is evidence. If the fact finder chooses to believe it, he can find as fact what the expert gave as an opinion. For a fact finder to award damages for a particular condition to a Plaintiff, it must find as a fact that that condition was legally caused by the defendant's conduct.

McMahon v. Young, 442 Pa. 484; 276 A.2d 534 (1971).

In *McMahon,* the plaintiff's vehicle was rear-ended by defendant's vehicle and Plaintiff brought a claim for an "arthritic condition" caused by a narrowing of the space between the fifth and sixth cervical vertebrae. On the question of whether this condition was caused by the accident, the doctor used the following language at different times in his testimony:

> (1) "[the automobile accident] is consistent with that sort of injury,"
> (2) "there is probably a cause and effect relationship,"
> (3) "my opinion is there is arthritis which is consistent with traumatic arthritis." Id.

In finding that this evidence was legally incompetent, our Supreme Court said:

> Here, the only evidence offered was that it was "probably" caused, and that is not enough. Perhaps in the world of medicine nothing is absolutely certain. Nevertheless, doctors must make decisions in their own profession every day based on their own expert opinions. Physicians must understand that it is the intent of our law that if the Plaintiff's medical expert cannot form an opinion with sufficient certainty so as to make a medical judgment, there is nothing on the record with which a jury can make a decision with sufficient certainty so as to make a legal judgment, Id.

Dr. Finkelstein's legally incompetent testimony is offered on repeated occasions and is eerily reminiscent of the expert's testimony in *McMahon,* forty years ago.

> Q. So you are not in a position to say, and you are not saying – I mean within the scope of your expertise – that vinyl chloride caused Mr. Branham's brain cancer?
> A. No. But I can say that a pattern is consistent with what a genotoxic compound would do.

N.T. 10/6/2010, A.M. Session, p.58.

> Q. Now, when you're looking at the exposure that you understand from somebody else occurred, you are actually not able to distinguish what specific chemical or agent caused this pattern that you say you've observed?
> A. Yes.
> Q. You cannot?
> A. I cannot.
> Q. And it's your position that anything that is genotoxic that somebody was exposed to could have caused it?
> A. Yes.

N.T. 10/5/2010, A.M. Session, p. 78.

> Q. Right. But in terms of the mutational analysis that you presented, you cannot say as to any specific individual what the exposure was that caused it in a particular individual?
> A. Yes, that correct.

N.T. 10/5/2010, A.M. Session, p.79.

> Q. When you look at Mr. Branham's case, for instance, and the data comes through the process as showing these five locations along chromosome 3 that are damaged, to be fair, this data doesn't wear a sign that says, "this was vinyl chloride that did this?"
> A. Right.
> Q. So, looking at this data, can you – can you say from this data alone looking at these five red lines this is vinyl chloride?
> A. No.

N.T. 10/6/2010, A.M. Session, p.74.

> Q. You personally, in terms of the mutational analysis that you presented, you cannot say as to any specific individual what the exposure was that caused it in a particular individual?
> A. Stated in that way, yes.

N.T. 10/6/2010, A.M. Session, p. 58.

After the conclusion of Dr. Finkelstein's testimony, Defendant made an oral motion which renewed a previously made motion, made prior to trial.

> MR. SOLANO: Your Honor, prior to Dr. Finkelstein's testimony—in fact, prior to trial—we moved to exclude the doctor's testimony on the grounds that it was inappropriate expert testimony.
>
> In light of the testimony by Dr. Finkelstein, Your Honor, we feel that we need to renew that issue with Your Honor.
>
> And Your Honor, there are actually two parts to the request:
>
> One, is that Dr. Finkelstein's testimony, according to what he said, is not generally-accepted in the scientific community.
>
> Dr. Finkelstein testified at page 85 of the transcript that:
>
> "Pathologists are not in the business of determining causation."
>
> Dr. Finkelstein testified that while others use the genetic analysis techniques that he uses, that other do not use those techniques to determine causation.
>
> That is at pages 91 and 92 of the transcript.
>
> Your Honor, there has been a lot of testimony here about Dr. Finkelstein's method of counting to four.
>
> He testified at least five times that that's his method.
>
> And Mr. Freiwald, yesterday in redirect, got Dr. Finkelstein to say that "if your method is counting to four, that's not something that's generally-accepted in the scientific community."
>
> This morning Dr. Finkelstein testified in response to Mr. Van Wart's questions that no one, no pathologist, infers causation from indiscriminate changes in chromosomes.
>
> He knows of no other scientists, no peer-reviewed article, that says that.
>
> And Your Honor, finally, just putting aside the question of his counting to four, what is the method, on page 93 of yesterday's transcript, Dr. Finkelstein was asked this question:
>
> "Question: But as we sit here today, the method that you have described in your testimony, the method that you were using to reach conclusions about causation, that method is not recognized and accepted by the scientific community?"
>
> And Dr. Finkelstein responded:
>
> "No, it's not."
>
> "No, it's not."
>
> "You're right in that sense."
>
> "But, again, I would just say that the methods used are

ones which are reasonable and acceptable with pathologist."

Your Honor, by Dr. Finkelstein's own testimony, the methodology that he used is not generally-accepted in the scientific community.

That's Point 1.

Point 2, Your Honor, is that Dr. Finkelstein was here today and yesterday to testify as to causation.

The opinion in his report is:

"Based on these results, it is my opinion that brain cancer was more likely than not caused by exposure to chlorinated solvents, including vinyl chloride."

And, yet, Your Honor, when he was asked about that yesterday and today, he said he really couldn't say that.

He said that his analysis "disclosed a pattern that is consistent with genotoxins."

That's at page 78 of the transcript.

But he says he can't say that is was any specific genotoxin that caused it, and he can't say that it was vinyl chloride.

He said again this morning in response to Mr. Freiwald's question, he said that he doesn't know which genotoxin, what each person was exposed to; and, so, he doesn't know which genotoxin caused that person's illness.

He admits that it could be any genotoxin at all.

And, again, Mr. Freiwald asked that question.

And, in essence, Your Honor, his testimony comes down to that his analysis shows that these mutations may have been caused by something—each of the mutations may have been caused by something—but he doesn't know what; it just may have been some sort of genotoxin, perhaps a different one in each individual.

And yet, Your Honor, the Jury was shown portions of his report in which he opines that it was caused by vinyl chloride.

Your Honor, because of these two reasons—that his testimony, by his admission, is not generally-accepted, and that his testimony shows that he cannot establish causation—we believe that Dr. Finkelstein's testimony should not be considered.

N.T. 10/6/2010, A.M. Session, pp.80-84.

Considering the above Finding and the record as a whole, the Motions are granted and Dr. Finkelstein's testimony is stricken.

After five weeks of this Trial, Plaintiff's Expert on epidemiology, Dr. Richard Neugebauer, was called to testify in this matter. The testimony was critical to the Plaintiff's theory of liability because it was Dr. Neugebauer's opinion that there was a brain cancer cluster that served as the antumbra to all of the other Expert Opinions and that they served as the annulus to his central thesis of brain cancer clusters.

It is also clear that Dr. Neugebauer provided the conclusion in this theoretical process in the form of a brain cancer cluster and that the other experts relied upon this conclusion to create some relevance for their own theoretical models.

This reliance upon Dr. Neugebauer's brain cancer cluster theory by the other Plaintiff's Experts is well documented throughout this record and will be referred to in later parts of these findings.

For the moment, we will focus upon Dr. Neugebauer's theory and set down what he offered in his written Expert Report that was provided prior to Trial and would be the legal template for his Trial Opinion. (Citations omitted).

In the opening pages of Dr. Neugebauer's Report, he lays out what his objective is:

> to show that the incidence rates of two brain cancers—oligodendroglioma and glioblastoma—among persons exposed to carcinogens released into the environment by Rohm and Haas/Modine in McHenry County Illinois are elevated relative to the expected incidence rates of these brain cancers among persons unexposed to these compounds.

Dr. Neugebauer's Report 2008, p. 5.

He intends to do this by showing that the cases of brain cancer in both forms in his study are greater than the number of brain cancers found in an unexposed population.

The mechanism for demonstrating this, under epidemiological principles, is the use of a Standard Incidence Ratio (S.I.R). This is the ratio of observed cases to expected cases or O/E. (Neugebauer Report, p.11).

Because this number and the methods for calculating it are simple on its surface and complicated beneath the surface, some further explanation is warranted.

The first component of the O/E is obviously the O or *observed* cases figure. The way this is generated is critical to the calculation since it is the numerator in a common fraction where both the numerator and denominator (n/d) are very small numbers, making this ratio very sensitive to changes in either number.

In the instant matter, the numerator is eight (8), which represents the eight (8) Plaintiffs in Dr. Neugebauer's Report.

> Branham, et al. vs. Rohm and Haas Co., et al.
> PCCP, May Term, 2006, No. 3590
>
> Depaepe, et al. vs. Rohm and Haas Co., et al.
> PCCP, July Term, 2006, No. 2081
>
> DiBlasi, et al. vs. Rohm and Haas Co., et al.
> PCCP, July Term, 2006, No. 2078
>
> Freund v. Rohm and Haas Co., et al.
> PCCP, May Term, 2006, No. 3603
>
> Milliman, et al. vs. Rohm and Haas Co., et al.
> PCCP, May Term, 2006, No. 3606
>
> Weisenberger, et al. vs. Rohm and Haas Co. et al.
> PCCP, May Term, 2006, No. 3600
>
> Weisheit, et al. vs. Rohm and Haas Co., et al.
> PCCP, May Term, 2006, No. 3596
>
> Wierschke, et al. vs. Rohm and Haas Co., et al.
> PCCP, May Term, 2006, No. 3591

Neugebauer Report 2008, unnumbered first page.

The denominator is the number of cases expected to naturally occur in a study population.

The size of this population would be critical to the resultant ratio because of the small size of the observed cases.

For example: Assume that the expected number of cases would be .5 for every 10,000 persons. For a population of 15,000 persons, that would produce an "E" of .75. Using the formula employed by Dr. Neugebauer in his 2008 Report, the calculation would be S.I.R. O/E- O= 3 cases observed; E=.75 cases expected.

S.I.R. $3 \div .75 = 4$. Using Dr. Neugebauer's method, the 4 represents a conclusion that there are 4 times as many cases observed than expected.

Now assume that the population group that should have been considered in the E component was 45,000, then the calculation might have been:

S.I.R. $3 \div 2.25 = 1.33$. This shows that there are 1.33 times as many cases observed

as expected.

One more assumption and that is that the number of observed cases is 2. The calculation is now S.I.R. 2÷ 2.25 = .89. This means that there are less cases observed than expected.

The examples show how sensitive the conclusions are to small variations in numbers and/or substitution of smaller study populations.

Dr. Neugebauer agreed to this concept during his testimony:

> Q. Are you familiar with the Law of Large Numbers, Doctor?
> A. You would have to clarify that for me.
> Q. Do you agree that the Law of Large Numbers guarantees that very large samples will be highly-representative of the population from which they are drawn; so the more data, the larger the population, the more representative of the population from which they are drawn?
> A. The more likely they are to be representative.
> Q. And, conversely, the smaller the data, the less likely they are to be representative of the population from which they are drawn?
> A. Correct, they are less likely to be

N.T., 10/20/10, A.M. Session, pp 10-11.

The issue of the size of the study population concerns the selection of this population and the related problem known in the discipline of epidemiology as boundary shrinkage.

> Q. Now, going back to the Elliott and Wakefield article that you cited, there is a discussion –
> MR. VAN WART: Matt, can we pull up DX-2554.
> Q. The next-to-last paragraph has a discussion of boundary shrinkage and the Texas sharpshooter.
> It says:
> "A related selection problem that has beset this type of cluster investigation is what has been called boundary shrinkage, or the Texas sharpshooter effect."
> And they say, "Rothman" –and you know who Dr. Rothman is, he is a very famous epidemiologist; and you cite some of his works, right?
> A. Yes.
> Q. It says here:
> "The boundaries, geographic temporal" – temporal means time?
> A. Yes.
> Q. --demographic disease tightening around the cases. Thus, while the observed number of cases is retained (the

cluster), the expected number is reduced; hence, increasing the observed expected ratio," and here they use the standard mortality ratio.

It goes on to say – the point here is that if you have a set number of cases in a small area, because you are looking at a small area, the expected number itself is going to be relatively small; right?

A. Correct.

Q. And, so, if you draw your study area too narrowly, you can increase your observed to expected ratio?

A. Unless, of course, in drawing it very narrowly you also exclude some of the cases.

Q. Right.

And the other problem is that if you draw it too tightly, then you can inflate the observed to expected ratio; and the observed to expected ratio is at the core of your analysis here, correct?

A. Well, the –

Q. Can you answer my question?

Your analysis is based on the number of observed cases to the expected?

A. Correct.

Q. Right.

And, so, what they are discussing here is the problem of drawing the area too tightly where you are calculating your observed cases to expected cases ratio?

A. Drawing the boundary too tightly can also exclude cases; so you, in fact, reduce the size of the ratio of observed to expected.

It doesn't inevitably result in an increase in the SMR.

Q. But it might not inevitably, but it's a concern that has to be taken into account in deciding which areas you are going to choose to calculate observed to expected; correct?

A. This consideration should not be taken into account.

Q. It should be taken?

A. It should not be taken into account.

Q. It should not be taken into account when you are drawing your geographic area too tightly?

A. No.

You should draw your geographic area where the exposure is.

Q. And make sure that you have a legitimate basis for selecting those areas?

A. Yes, correct.

You should select them blind to where the cases are.

Q. And if you wanted to be fair-minded and do a good job in a cancer cluster investigation, what you would say to an environmental scientist is, "Tell me all of the areas that you

calculate have been exposed to some hazardous substance and that's the area where I am going to calculate the observed to expected ratio?

A. Correct.

N.T., 10/20/2010, A.M. Session, pp. 13-16.

As Dr. Neugebauer outlined in his Report, he began his analysis by determining his study area to be one that, according to him, was pre-determined by the U.S. Environmental Protection Agency contractor, issued in 1990.

Q. And so that's why when you do a cancer cluster investigation, you have to find a different way to identify the area of study other than looking to where the known cases are?

A. Correct.

Q. Isn't that right?

A. Yes.

Q. And what you have done in your reports, which we are going to be discussing, what you've done in your reports is you've tried to explain how the areas that you have chosen for study do not run afoul of the Texas sharpshooter principle; is that right?

A. Correct; except that I didn't choose those areas.

Q. We are going to get to that, Doctor.

A. Okay.

Q. And one of the defenses that you have used, the word you have used in your report is a priori, which means before?

A. Yes.

Q. And what you have tried to say is that at least – we are going to pull up the areas tomorrow because we have a ballgame tonight—but with respect to Areas 1 and 2, your position has been that while Area 1 was based on this EPA report that you discussed with Mr. Freiwald; so, therefore, that area predates the identification of these cases in McCullom Lake; right?

A. Suspicions about that area predate it.

Q. Yes. And you said the same thing—that's the EPA report—which was the basis for defining your Area 1?

A. Correct.

N.T. 10/19/2010, P.M. Session, pp. 86-87.

What was revealed during testimony was that Dr. Neugebauer did not use the areas predetermined by the report but reduced the area significantly and in so doing, reduced the size of the study population and the number of expected (E) cases in the equation.

The EPA report cited by the Doctor, actually determined that the target population

was approximately three (3) times larger than the population used by Dr. Neugebauer.

> Wells used for drinking water in the area are screened at depths ranging from approximately 20 feet to approximately 300 feet (Waller and Sanderson 1976). Local wells draw water from the aquifer of concern within a 3-mile radius of the site and serve approximately 29,776 persons, which is the target population potentially affected by groundwater contamination.

EPA Report, pp. 5-2 and 5-3.

Compare the Neugebauer Report, Area 1, Residential Population, 11,082 at p.12 of the Report. The way Dr. Neugebauer accomplished this reduction was to use the southern one-half of the three (3) mile radius, although the exposed population was within the full three (3) mile radius of the circle. How this decision to reduce the target population in Area 1 impacted the SIR for the type of cancer that Mr. Branham had can be readily discerned with simple calculations and reference to Dr. Neugebauer's summary of Area 1.

EPA Population at Risk 29,776, plus employed population (Dr. Neugebauer) of 4497, for a total population of 34,273. Using Dr. Neugebauer's expected number of cases, which is .42 per thousand population and the EPA population would produce 14.4 expected cases in Area 1 instead of 6.57 cases produced in Dr. Neugebauer's table. (Dr. Neugebauer Report 2008 at 14, Table for Target Area 1). Accepting Dr. Neugebauer's 4 cases (glioblastoma) this would produce an SIR of 28 instead of 61, which means that Area 1 has 72% fewer cases of glioblastoma than expected.

If one uses this same approach for Dr. Neugebauer's calculation of the SIR for Oligodendroglioma, the numbers using the exposed population per the EPA report, the SIR would be reduced to 161 instead of 406 which is an approximate 60% reduction or that there is about 1.5 times more oligodendroglioma than expected as compared to Dr. Neugebauer's statement of 4 times more oligodendroglioma than expected.

The next study area focus for Dr. Neugebauer was Area 2, which he has identified as the "area directly south of Rohm and Haas/Modine- Census Tract 8706.03 (see Figure 1) Neugebauer Report, p.15.

Initially, Dr. Neugebauer based his study area for Area 2 upon a private industry study that was identified as the STS Report.

> The target areas were defined without reference to any information regarding the Plaintiffs' residential location. Rather, two of the target areas are based on U.S.

Environmental Protection Agency (EPA) and private industry studies, and the other two areas were determined by environmental scientists with specific training in environmental contamination based on hydrogeological and atmospheric dispersion models.

Undated Affidavit by Dr. Neugebauer, Exhibit P-106.

Q. So you than chose that area that builds a nice, big frame right around the McCullom Lake area; correct?
A. Yes.
Q. And you said you based it on the STS report?
A. Yes.

N.T. 10/20/2010, A.M. Session, p.96.

Initially, Study Area 2 was viewed as being a refinement of Study Area 1 by the use of an even smaller target population defined as census tract 8706.3 and 8706.4.

Q. And you were discussing with him some calculations that you had – you were telling him about the implications of selecting certain areas of study?
A. Yes.
MR. VAN WART: And if we can just pull that up, Matt.
Q. And you let him know that you were in touch with the Illinois Cancer Registry to get their data; correct?
A. Correct.
Q. And said that:
"You will see below that an analysis, for example, limited to census tracts 8706.4 and 8706.3 would provide a very imprecise estimate—in this example, an overestimate—of the size of the target population."
So we talked about this formula, and you reviewed it also with Mr. Freiwald, observed cases over expected; is that right?
A. Yes.
Q. And the larger the population that you examine, the larger the number of expected cases, right?
If you have a population and you are calculating the expected number of cancers.
A. Yes.
Q. If you have a larger population, you will expect more cancers than if you have a small population?
A. Typically, yes.
Q. And, so, what you are saying is that if you use both of these census tracts, 8706.4 and 8706.3, you would overestimate the size of the target population.
So, you would have more expected cases if you overestimate the size of the target population?

A. No.

The target population refers to the people who are exposed.

Q. Doctor, on June 4th 2007, you didn't know what population had been exposed because you didn't have the reports from the experts at that point.

A. No, but I certainly knew that it was in a southerly—or I believed it was in a southerly direction, and 8706.3—sorry, 8706.4—frankly, I forgot right now which way—it's off to the side, so to speak, but it's not due south.

MR. VAN WART: Matt, can we pull up Exhibit A to Paxil-849.

That's an exhibit to the doctor's Illinois Cancer Registry report.

Your Honor, just one moment.

THE COURT: Doctor, I just want to make sure I understand what your testimony is, and hopefully the same issue that I have would be one that the jury might have, that your testimony is that as of the time of the authorship of this e-mail on June 4th of 2007, you were not award of the specific cases that were identified in the reference population, the exposed population?

THE WITNESS: I mean, I was—I think I was probably aware of all, or virtually all, of the then-known plaintiffs in the case.

THE COURT: You were aware?

THE WITNESS: Yes, I was.

Q. So, Doctor, so you knew the cases, you knew how many cases had been filed, you knew where they were located, but you didn't have in hand the analysis of the experts about where the exposures were; correct?

A. I assume that's correct.

Q. And if we look at these two census tracts, what you are saying in your e-mail is to keep it focused on this tract where you knew the cases were, and not over here where you knew there were no cases. You don't know of any cases in this area to the southeast, do you?

A. The focus on –

Q. Can you answer my question?

A. I'm sorry, repeat it.

Q. At the time you wrote this e-mail, you knew there were cases in census tract 9706.03; correct?

A. Yes.

Q. You didn't know of any cases in the census tract that ran to the southeast, 8706.04?

A. I don't think I did.

Q. And you had no basis from an environmental expert to be saying on June 4th, 2007 that you should be focusing on

this particular census tract and not include the one to the southeast?

A. Well, I did have—

Q. Did you have a basis from the environmental experts—

A. Oh, I'm sorry. I was referring to the environmental experts who wrote the STS report which said in a southerly direction.

And I also had the critique by Dr. Buffler that it was due south, and I took that as informative.

Q. Doctor, you have been saying that the reason you don't have a Texas sharpshooter problem is because the exposures were going to be calculated by experts, and you were going to pick the areas based on what those experts said; is that right?

A. Yes, but I—sorry, yes.

Q. And, then, already in June, before you have those reports, you're already discussing dropping—getting rid of this census tract to the southeast?

A. That statement was based upon the opinion of three prior experts:

The EPA report, which said it was to the south—I'm sorry, which said it was within a three mile radius;

The STS report, which said it was in a historical southerly direction, or southwest even, which would kind of suggest there would be little grounds for expecting it to be to the southeast;

And, finally, there was Dr. Buffler saying very explicitly that to expect there to be an increased rate in the whole southern semicircle was without foundation; that the proper place to look would be due south.

As it turns out, just by the Census Bureau Division of things, the census tract in orange—or on my version here, in pink—happened to correspond to that area.

Q. Doctor, isn't it fair to say what you should have been doing in June, rather than pre-calculating, or trying to determine what areas you don't want in there, you should have waited until you got the expert reports that said exactly where the exposures were?

A. But that would suggest I knew nothing prior to that moment.

THE COURT: Is it your testimony that 8706.04 is not south of the Ringwood area?

I'm not sure what—

Q. Doctor, this is Ringwood right here (indicating), correct?

That's the Ringwood plant?

A. Yes.

Q. And this area is to the southeast?
A. Correct.
Q. That's the Fox River here (indicating).
And, so, you have this census tract that is immediately east of McCullom Lake, and it's south and southeast of Ringwood; correct?
A. Uh-huh.

N.T. 10/20/2010, A.M. Session, p.52.

In reviewing the reports under consideration, i.e., the EPA Report and STS Report, it became clear that the Reports identified the area southeast of the plant as a potential area of exposure.

> The aquifer of concern is the combined glacial till and Silurian dolomite aquifer. Water is obtained at various depths from the aquifer of concern (Waller and Sanderson 1976). The depth to groundwater is 20 feet, measured at monitoring well MW3 located near the center of the site, adjacent to the landfill. The direction of groundwater flow is to the southeast according to Nicholas and Krohelski, and a map from a site report (IT Corporation 1985).

EPA Report 1990, P-623.

The STS Report, is equally without support for Dr. Neugebauer's decision to restrict the study population to census tract 8706.3.

> Average shallow and deep May 2006 groundwater elevations were approximately 2.0 feet and 0.9 feet higher (respectively) than those measured in December 2005, which is likely as result of seasonal precipitation patterns. The groundwater elevation data continue to indicate a downward vertical hydraulic gradient, which decreases in magnitude toward the eastern Modine property boundary. The inferred direction of shallow groundwater flow is north-northeasterly near the facility building at a horizontal hydraulic gradient of 0.022, and easterly within the eastern portion of the property, at a horizontal hydraulic gradient of 0.041. The inferred deep groundwater flow direction is south-southwesterly at the site, at a horizontal hydraulic gradient of 0.023. The direction and magnitude of these hydraulic gradients are generally similar to those measured during previous groundwater monitoring events conducted since remedial system start-up in March 2003. The relatively low groundwater elevations may have been responsible for the south-southwesterly component of deep groundwater flow; the historical direction of deep groundwater flow has been to the south. Measured groundwater elevations are provided in Table 1.

STS Report of June 14, 2006, P-316.

The impact of including census tract 8706.04 in the Area 2, SIR calculation would reduce the SIR for glioblastoma multiform (deceased Plaintiff's cancer type) to 136 which is half of the opined value of 272 (assuming a doubling of the population by adding a similar census tract).

Dr. Neugebauer next created a study Area 3, which was purportedly developed upon another expert's (Dr. Zanetti) air contour delineating "a greater probability of exposure." (N.T., 10/20/2010, P.M. Session, p.12). But as revealed during cross-examination, Dr. Neugebauer's decision to develop this Area was not based upon Dr. Zanetti's report but upon decisions made by Plaintiff's counsel, which restricted information available to him and his own decision to ignore information in the report.

> Q. Okay. Let's turn now to Area 3. Doctor, Area 3 is the area that you say was exposed to air contamination or that you – based on what information has been provided to you, you are assuming that—
> A. Yes.
> Q. --it represents an area of air contamination?
> And that area was based on contours provided by a Dr. Zanetti?

N.T. 10/20/2010, P.M. Session, p.10.

> Q. And your understanding was that you were getting from Dr. Zanetti the area that had been exposed to some chemical, vinyl chloride or some chemical from the Ringwood plant?
> A. Not quite.
> Q. Were you looking for the exposed area?
> A. It was my understanding the individuals living within the borders of the line you just identified had a greater probability of exposure.
> It's not as though on the –well, on the western edge of the blue line, the west side, exposure ceased or risk ceased at that point.

N.T. 10/20/2010, P.M. Session, p.12.

> Q. But, Doctor, do you see how the contour lines end in a field?
> A. Yes, I do.

N.T. 10/20/2010, P.M. Session, pp 12-13.

* * *

> Q. Now, did you think that the exposure area ended in the

middle of a field?

A. No. As I just said, I didn't view that as demarcating the point where exposure ended.

Q. Did you ask Dr. Zanetti why his contours ended in the field?

A. I did not.

N.T. 10/20/2010, P.M. Session, p.13.

* * *

Q. Did you ask Dr. Zanetti to give you contours that showed the entire area that had been exposed to vinyl chloride from the Ringwood plant?

A. No, I did not.

Q. Was it your understanding in selecting your boundary areas, based on this model, that there were areas beyond the 0.08 line that had been exposed to vinyl chloride from the Ringwood plant?

MR. FREIWALD: Objection, asked and answered.

THE COURT: Overruled.

THE WITNESS: I'm sorry. Ask the question again.

BY MY VAN WART:

Q. Was it your understanding that there were areas farther away, outside the 0.08 contour, that had been exposed to vinyl chloride from the Ringwood plant.

A. As I have said before, I do not and did not view that line as sort of an absolute, so to speak, line in the sand beyond which there was no exposure to chemical contaminates.

N.T. 10/20/2010, P.M.Session, p.15.

THE WITNESS: Okay. No, I did not—I forget the exact formulation. But no, I did not view it as ending an area beyond which there was no exposure.

BY MR. VAN WART:

Q. And did you say to Dr Zanetti: I want to know not this area which forms a circle around McCullom Lake, I want to know the whole area that you say according to your exposure model has been exposed to vinyl chloride?

A. I did not ask him that.

N.T. 10/20/2010, P.M. Session, pp.12-16.

Q. And did you know that Dr. Zanetti knew precisely where the cases were in McCullom Lake?

A. I did not know that.

Q. Would that surprise you?

A. I've been told that he did not know.

Q. Who told you that?

A. Mr. Freiwald.

Q. Mr. Freiwald told you that Dr. Zanetti did not know?

A. Correct.
Q. Now, the first question: When you saw that these contours just ended in the field, and you see how the interior contours are almost closed?
A. Yes.
Q. Did you say to Dr. Zanetti: Close that contour, I want to see the whole area that's affected?
A. I did not.
N.T. 10/20/2010, P.M. Session, p.17.

Q. Do you see in Page 6 he says [reading]: To date we have received through counsel and examined the following documents and data?
A. If this was part of one of the documents I received, and I did receive some documents produced by Dr. Zanetti. This was not one of the documents that I looked at.
N.T. 10/20/2010, P.M. Session, p.19.

Q. This was his expert report; correct?
A. Bases on what you are saying, yes.
Q. Are you questioning that?
MR. VAN WART: Do we have another copy?
THE WITNESS: I just didn't want to attest to something I didn't know firsthand.
There's additional material in his C.V. and other items in the back of the report, which I don't think I received. But from what I can recall, I received probably somewhere starting around Page 20—I'm sorry, no, starting around Page 21 to around Page—not around, to Page 41.
MR. VAN WART:
Q. Who made the decision about what pieces to send you?
A. Dr.—Mr. Freiwald.
N.T. 10/20/2010, P.M. Session, pp.19-20.

Q. Did you ever ask, by the way—after you only received these pieces of the expert report, did you ever ask for the full report?
A. No, I did not.
N.T. 10/20/2010, P.M. Session, p.27.

Q. And as the lead epidemiologist on this case, you didn't make it your business to find out what this really represented?
A. I accepted it as the product of another scientist, the results of another scientist's investigation.
Q. And you never took the time to tell the experts who were developing these exposure estimates or areas that they're not supposed to know where the cases are located when they

do their analysis?

A. Well, one of my—

Q. Can you answer my question?

A. I'm sorry. Ask it again.

Q. Did you go to these exposure scientists and say: When you are doing your analysis for purposes of my epidemiology project, you can't draw your areas knowing where the cases are?

Did you tell them that?

A. I did not.

Q. And when did Mr. Freiwald tell you that Dr. Zanetti did not know where the cases were?

A. Maybe about two years ago, three years ago—two years ago, I think.

Q. And so until today since you did your reports, you have labored under the belief that these experts didn't know where the cases were?

A. That's correct.

Q. And that's why you made the statement that you did to the Illinois Cancer Registry, the statement we discussed earlier today?

A. Yes.

Q. Now, you see that this exposure line is 0.08. And you're aware that Dr. Zanetti prepared this in 19—excuse me, in 2007?

A. Yes.

Q. Do you know that Dr. Zanetti has updated this report?

A. I did not know that.

Q. Do you know that he in 2008, when you—well, first of all, I think we discussed this before that in your original report you had called your results preliminary; correct?

A. Yes.

Q. And in your 2008 report you dropped the word "preliminary" but presented essentially the same report?

A. Correct.

Q. Did you know that Dr. Zanetti in 2008 undertook a new analysis where he increased his exposure estimates by a factor of four?

A. I did not know that.

Q. Do you know that this 0.08 line isn't the line that he contends exists today?

A. I didn't know that.

Q. Do you know how far out—if you were to use the same 0.08 mark today, do you know how far away from the plant you'd have to go?

A. No, I don't.

N.T. 10/20/2010, P.M. Session, pp. 31-33.

Dr. Neugebauer developed another Zone 4, as another zone of exposure to support his theory but this time, he used a water plume mechanism as the method of transportation of the alleged toxic chemical. As with the other experts with whom his theory rested, he had little if no evidence to base his theory of exposure upon or ignored evidence which would have contradicted or refuted his exposure decisions. The theoretical exposure was based on the Andrews Plume.

> Q. Doctor, you already testified earlier that you personally have no idea whether this Andrews Plume or the deep plume actually exists; correct?
> A. That's correct.
> Q. And that plume makes up Area 4 of your analysis?
> A. Correct.
> Q. And you—in making the—how did you make the decision that you were going to rely on Dr. Andrews for his analysis of where that plume was or that it even existed?
> A. He was the hydrogeological scientist who was providing an estimate for this case.
> Q. And in deciding to rely on Dr. Andrews, did you decide that you weren't going to rely on what the public health authorities said about that plume and whether it existed?
> A. I'm not sure which report from the public health authorities you are referring to.
> Q. Well, did you make any attempt? You didn't go to the Illinois EPA to say: Look, this guy Dr. Andrews who has been hired in litigation has given me this plume. Before I undertake an analysis based on it, I want to know if you have any information to support it?
> A. I searched Google to identify whether there were reports from Illinois, either the Department of Health or EPA, and didn't find them.
> MR. VAN WART: Doctor, we are going to pull something. One second.
> BY MR. VAN WART:
> Q. I believe this has previously been used. It's Defendants' Exhibit 422. Doctor, did your Google search come up with that document?
> A. No, it did not.
> MR. VAN WART: Matt, can you pull that up?
> BY MR. VAN WART:
> Q. Do you see that's a document from the—it's called the Illinois State Water Survey. It's part of the Illinois Department of Natural Resources.
> A. Yes.
> Q. It's dated September 8th, 2006.

A. Yes.
Q. That's about a little more than a month before you submitted your first report in this case?
A. Yes.
Q. And it says [reading]: Re: Linking McCullom Lake area to Ringwood groundwater contamination.
MR. VAN WART: And it we could go to the last page. I'm sorry, Matt, the text.
BY MR. VAN WART:
Q. Do you see where his conclusion in his report to McHenry County says [reading]: Based on these maps, including the groundwater potentiometric surface maps and the plume configuration maps and what is known about the regional hydrology of eastern McHenry County, contaminates have not reached the McCullom Lake area.
Were you aware that they had taken that position?
A. No, I was not.
Q. Were you aware that the Illinois Water Survey had taken the position that Plaintiff's theory, such a phenomenon, goes against the physical laws that dictate groundwater movement.
Were you aware of that?
A. No, I was not.
Q. Is that information you would have taken into account back in 2006 and 2007, if you had been aware of it?
A. I would have taken it into account insofar as I would have raised it with the hydrologist.
N.T. 10/20/2010, P.M. Session, pp. 36-40.

The above evidence demonstrates how Dr. Neugebauer manipulated or disregarded the parts of the scientific information upon which he claims to have relied in an effort to arrive at the conclusion that he intended, which was an increased SIR. He did this by the use of the device of gerrymandering or making his area of exposure which determines the E or expected number of cases element of the equation conform as closely to the area where he knew the observed cases were, to virtually insure an increased SIR by decreasing the E component. This was frequently referred to by defense counsel as the "Texas Sharpshooter Snydrome" and is well known in epidemiological literature as false methodology.

The other method Dr. Neugebauer used to manipulate the SIR, was the inclusion of observed cases that did not satisfy the rules for such inclusion. This would have the effect of inflating the O part of the equation which would lead to an increased SIR.

The first example of this can be found in the use of Scott Milliman, who appears in all four of Dr. Neugebauer's study areas. Inexplicably, Dr. Neugebauer, first claimed he put

Mr. Milliman in all four areas, and then revised his answer to say that he didn't.

> Q. Doctor, at some point you had to make a decision about what area Mr. Milliman belonged in; correct?
> A. Yes.
> * * *
>
> BY MR. VAN WART:
> Q. Now, you decided to put him in all four areas; correct?
> A. Yes.
> * * *
> THE WITNESS: Can I revise by response?
> No, I did not put him in those four areas.
> BY MR. VAN WART:
> Q. Well, does Mr. Milliman's name appear in all four areas?
> A. Yes. But he is in those areas. I didn't put him there.
> Q. Doctor, somebody had to take the name and put it into your computer. Did you at least do that?
> A. No. That suggests that I somehow played some role in placing him there. I played no role.
> THE COURT: Well, who did if you didn't?
> THE WITNESS: You could go to your own address on Google or Google Earth and it will tell you where he lived.
> THE COURT: He doesn't live in the area. He worked in the area.
> THE WITNESS: I'm sorry, I was referring to the other people.
> THE COURT: He was talking about Mr. Milliman who was a sheriff.
> THE WITNESS: I'm sorry.

N.T. 10/20/2010, P.M. Session, pp. 60-62.

Dr. Neugebauer included Mr. Milliman in Area 3 which is the air exposure contour study for the period between 1968 and 1989, although he did not begin working in the area until March 1998.

> Q. And the other thing that's unusual about Mr. Milliman is that unlike Mr. Branham who had lived in the area since the 1960's, Mr. Milliman only began working in March 1998; is that right?
> A. Yes.
> Q. And he was diagnosed in 2002; is that right?
> A. Correct.

N.T. 10/20/2010, P.M. Session, p.52.

Dr. Neugebauer's basis for including him could not be supported by his own

inclusion criteria and appears to have been included at the direction of Plaintiff's attorney.

BY MR. VAN WART:

Q. Doctor, the 0.08 contour that defines Area 3 is for 1968 to 1989, correct? Do you see right at the top?

A. Yes.

Q. And, if we go back to Mr. Milliman—

MR. VAN WART: Go back to those charts.

BY MR. VAN WART:

Q. Mr. Milliman only came into the area in 1998, almost ten years after your area contour; after your air contour.

A. Correct.

Q. So under that contour you don't have any basis to assume that he was even exposed.

A. But the implications—not the implication, but the contour doesn't disappear as time passes.

The levels of exposure might decrease but the contour is still present.

Q. Doctor, you came into this case, and I think you've been saying you did a dose response analysis.

A. Yes, I did say that.

Q. And your dose contour, your exposure contour, is only for the period 1968 to 1989. It says it right on it, correct?

You don't present any contour that says what the exposure levels would have been for purposes of your study or anybody like Mr. Milliman who only shows you in 1998.

A. The reference in the report?

Q. Is that right, Doctor?

A. I wasn't sure there was a question. I'm sorry, repeat the question.

Q. You don't have anything in your report that provides a basis for including somebody in Area 3 if their exposure is in 1998 because you don't have a contour.

A. The contour continues in later years as reflected in later—

Q. How do you know that? Is that in your report?

A. Not specifically, no.

Q. Is it generally?

A. I beg your pardon?

Q. Is it generally in your report?

A. I don't know what you mean by "generally."

Q. Did you say in your report: I'm going to put somebody in Target Area 3 even if they have not been exposed during the period 1968 to 1989?

A. I didn't say that.

Q. But you went further. You are saying he belongs in Area 3. Now, he doesn't work—he doesn't live in any of these areas; correct?

A. Correct.
Q. But in addition to putting him—you put him in Area 3 because of what?
A. My understanding that his route—his beat as a police officer was within that area.
Q. Who told you that?
A. Mr. Freiwald.
N.T. 10/20/2010, P.M. Session, pp.62-64.

Mr. Milliman was included in Area 4 which was the groundwater plum exposure study, which was contradictory to Plaintiff's expert, Dr. Ginsberg's analysis which Dr. Neugebauer claims to have never received, which begs the question as to where he received his information for inclusion.

Q. Do you know that Dr. Ginsberg has submitted a report in this case?
A. Yes, I do.
Q. And you know that he has submitted a report specifically on Mr. Milliman?
A. I don't recall seeing that report. I may have seen it.
N.T. 10/20/2010, P.M. Session, p.65.

That question was later answered.

Q. Now, Dr. Ginsberg's role in this case is to take exposure concentrations and then turn them into individual doses; correct?
A. Yes.
N.T. 10/20/2010, P.M. Session, p.66.

THE COURT: No, I just want you to give—how did you determine Mr. Milliman's dose?
THE WITNESS: Sorry. Based upon where he lived.
THE COURT: And where did he live?
THE WITNESS: Let me rephrase. Let's set aside Mr. Milliman for a moment. Let's take—
THE COURT: Did you consider him to be an equivalent full-time resident in McCullom Village for dose purposes?
THE WITNESS: In effect, yes.
THE COURT: Go ahead.
BY MR. VAN WART:
Q. Now, not only did you treat him as an equivalent full-time McCullom Lake resident, you put him right above this Andrews Plume, this deep plume.
A. Correct.
* * *

Q. You see this is Dr. Ginsberg's Technology Evaluation of Brain Cancer Causation in Scott Milliman. Do you see that? October 25th, 2008.
A. Yes.
Q. And if you turn to page 31, bottom of the first paragraph under his exposure assessment—first of all, he describes Mr. Milliman's patrol duties. And then he concludes, he says [reading]: Exposure pathways related to residential use of groundwater are not relevant for Mr. Milliman.

Were you aware that Dr. Ginsberg had said the groundwater exposure pathway is not relevant to Mr. Milliman?
A. I was not.
Q. And if you go to the bottom, do you see that Mr. Ginsberg is saying that his statement of Mr. Milliman's exposure assumes that Mr. Milliman was spending 80 percent of his time in Ringwood? At the bottom, do you see that right there?
A. Right, the highlighted part.

I was not aware of this.
Q. That's different from the assumption that you've made in putting him in Area 4?
A. Correct.
Q. That has an important effect on your analysis?
A. Yes.
Q. Did you ever ask to see copies of Dr. Ginsberg's individual workups to make sure that they were in sync with what your assumptions were?
A. No, I did not.
Q. I want to ask again—

MR. VAN WART: If we could go back to that chart, Matt.

BY MR. VAN WART:

Q Who told you that you had enough information to put Mr. Milliman in Target Area 4?
A. Mr. Freiwald.

N.T. 10/202010 P.M. Session, pp. 69-72.

Under Dr. Ginsberg's theory of exposure in the groundwater plume, the relevant activities were identified as not being related to drinking water.

Q. Did you understand from either Mr. Freiwald or Dr. Ginsberg that for people that they say lived above the plume, that they were exposed through showering and bathing and washing dishes?
A. Yes.
Q. And gardening, using a garden hose?

A. Yes.
Q. And when you decided to put Mr. Milliman in Area 4, did you think, as a policeman, that those were the kinds of activities he engaged in, in Area 4?
A. No, it was based more on drinking water per se rather than showering and so forth. Although I don't know the particular—
Q. If you turn to Page 33 of Dr. Ginsberg's report which is P-110. I'm sorry. If you go to Mr. Branham's report which is—yes, P-110.
Doctor, this is the report that Dr. Ginsberg prepared for Mr. Branham.
MR. VAN WART: If we go to page 33.
THE WITNESS: Which page number is it?
MR. VAN WART: We'll get it.
THE WITNESS: I see, yeah.
BY MR. VAN WART:
Q. Doctor, this is the section of Dr. Ginsberg's report that relates to indoor air exposures stemming from contaminated groundwater.
A. Yes, I see.
Q. And do you see—if you go to the bottom paragraph, do you see where he is talking about the inhalation exposure pathway? He's saying that's what people breathe in, vinyl chloride vapors? Do you see that?
A. Yes, I do.
Q. And you see the reason he is focused on inhalation is because there is no clear link of vinyl chloride ingestion to brain cancer risk?
A. Correct. I see that, yes.
Q. Did you not understand that nobody is claiming that drinking the water causes brain cancer?
A. I did not understand that

Before leaving this section on Mr. Milliman, it is important to note one of the more illogical, counterintuitive and disingenuous arguments offered by Dr.Neugebauer in support of his fundamentally challenged theory of a cancer cluster in the McCullom Lake area.

It was noted earlier in these Findings that Dr. Finklestein used as a basis for his construct regarding specific causation, certain German Studies done in industrial exposures to employees in plants producing chloride solvent type chemicals.

Dr.Neugebauer also included Mr. Milliman in his exposed group because he was an employee, albeit not subject to industrial exposure.

Dr. Neugebauer did have a population of employees who were appropriate candidates for study because of their industrial exposure similar to the German Study. But, Dr. Neugebauer chose not to include them because they "exaggerated the risk" in the exposed area.

> Q. And Mr.Milliman, what is unusual about Mr. Milliman, he doesn't even live in McCullom Lake or even in the area, correct?
> A. He does not live in McCullom Lake.
> Q. In a case that is about McCullom Lake and the McCullom Lake cluster, the only way you could get more than a single case in McCullom Lake is by including a nonresident; correct?
> A. That's the only—well, I did include a non-resident, yes.
> Q. Now, Mr. Milliman was employed in the area; correct?
> A. Yes.
> Q. And you had made the decision as part of your analysis that you were going to include people if they either lived or worked in these target areas for whatever your specified time was.
> A. Correct.
> Q. The employees that you decided not to include were the employees of the Ringwood plant?
> A. That's correct.
> Q. You also decided not to include the employees of the other major employer in the area, Modine.
> A. I did not include them, because I considered that their exposure was of an industrial nature rather than of the type of exposure we were talking about here, which was residential populations.
> Q. Is that a significant difference to you?
> A. Yes. I would imagine that the individuals who worked at these plants were more severely exposed than the rest of the population, and to include them would, in fact, exaggerate the risk that might be associated with living in or working in the vicinity of McCullom Lake Village.
> Q. Doctor, wouldn't that make them then probably the ideal candidates for study because they have the higher exposures. If you don't have a problem there, you don't have a problem anywhere.
> A. No. Actually, no.
> Q. Did that ever occur to you or no?
> Did you ever consider, if you wanted to do a study, you wanted to include the employees of these plants where you say those are the highest exposures?

A. I thought it wasn't addressing the question that I was interested in. In other words, the question was whether people who live—the basic question was whether people who live in the vicinity of the chemical plant had an appreciable increased risk of brain cancer, not whether people who worked in an industry using those compounds. In the same way in which the studies, or all the ones that I'm aware of, examine rates of cancer of people living in the area of the particular dump. They don't investigate the garbage collectors who bring material to the dump and place it there; although they could do so.

Q. But the non-resident employee you decided to include was Mr. Milliman.

A. Yes, because he did not work at Rohm and Haas.

N.T. 10/20/2010, P.M. Session, pp. 49-52.

The fact is that the record reveals, as of the date of Dr. Neugebauer's report that there were no employees of either the Rohm and Haas or Modine plant (subject to industrial exposure), who were part of the observed cases in his study.

Based upon the record as it had been developed, it is reasonable to conclude that the decision to no include the employees was to avoid enlarging the exposed population (E) without being able to enlarge the observed cases (O). To do so, would have lowered his S.I.R.

As part of his support for his cluster cancer theory, Dr. Neugebauer had produced his aforementioned Tables demonstrating his increased S.I.R. as to the two forms of cancer.

One of the persons included was Judith Roszak. She was included in Area 1 and 2 in Dr. Neugebauer's 2008 Study as an observed case of glioblastoma (the same cancer that Mr. Branham had). Her address was identified in a chart in Dr. Neugebauer's 2008 Report as #10 with an address in McHenry, IL. (Unnumbered page of Dr. Neugebauer's 2008 Report).

10	Judith Roszak	3405 W. Cleveland Ave. McHenry, IL 60050	glioblastoma mutliforme	Sept 2006

In a memo dated April 5, 2007, from Plaintiff's counsel re Judith Roszak, it was identified that she was never a resident of McHenry County or McCullom Lake Village.

TO: Richard Neugebauer, Ph.D.

FROM: Glenn A. Ellis, Esquire

DATE: April 5, 2007

RE: Profile for Judith Roszak, deceased

* * *

Date first resided in area surrounding McCullom Lake Village:

Not Applicable

Date moved from area surrounding McCullom Lake Village:

Not Applicable

Address at time of death:

1 S. 543 Halsey Road, Oak Brook Terrace, IL 60181

* * *

Diagnosis:

Glioblastoma multiforme

Address at time of diagnosis:

1 S. 542 Halsey Road, Oak Brook Terrace, IL 60181

Date of diagnosis:

September 15, 2006

Unnumbered Page of Dr. Neugebauer's 2008 Report.

Dr. Neugebauer was asked about the presence of Ms. Roszak in the study:

> Q. Now, another person that you included for glioblastoma was Ms. Roszak, and she's in Area 1; and she's also in Area 2, right?
> A. With all due respect, I believe that that's a mistake.
> Q. This is a mistake? This is the letter that we got from Mr. Ellis.
> A. I understand that.
> Q. So what's the mistake?
> A. This particular individual was not included in the analysis.
> Q. Do you know who was included in the analysis? First of all, have you told the attorneys that this is an error?
> A. The other day, yes.
> Q. The other day? When did you tell them?
> A. If I said the other day, I meant the other day.
> Q. Well, what's the other day?
> A. Oh, I see. I didn't see this particular page until the other day.
> Q. Right. You say this page what, in preparation for your testimony?

A. Yes.
Q. And then you said you saw this—they said you might be asked questions about this letter?
A. I beg your pardon.
Q. Did they show it to you saying that you might be asked questions about this letter?
A. About what letter?
Q. Are we talking about the same thing? This chart is from a letter.
A. Oh, I'm sorry. I forgot exactly how it came up but I looked at that and I said—I looked at this table and I said that particular individual is not one of the cases included in the analysis.
Q. Well, how many days ago was that?
A. I don't remember offhand.
Q. Did you come into town on Sunday?
A. Yes.
Q. Do you have any idea why we haven't been told, why we're just learning this right now?
A. I do not have an idea why.
Q. Did you say to the attorneys: You know what, you'd better let them know because they thought for several years that you provided them correct data?
A. I did not—I did not tell them that.

N.T. 10/20/2010, P.M. Session, pp.82-84.

This testimonial admissions that one of the four observed cases of glioblastoma relied upon by Dr. Neugebauer, did not belong in the analysis (reducing the "O" component of the "O/E=S.I.R." by 25%) precipitated a series of events which began with the revelations for the first time that Dr. Neugebauer had "redone" his calculations prior to the beginning of trial.

Q. So how many cases did you have in Area 1?
A. The other three people are cases.
Q. Doctor, you testified earlier that in your Area 1 analysis where you had fewer cases than expected the number was four against six, more than six expected. 6.565 expected. That's on the other chart. Is there a fourth case or is it three?
A. That would take me a moment, more than a moment to determine.
Q. Do you have the name? What did you tell the lawyers the other day? Did you tell them the correct name or the correct number?
A. Yes, I did.
Q. What did you tell them?
A. It would take me a moment or so to find the page on which that is listed.

* * *

BY MR. VAN WART:
Q. Have you redone your calculations?
A. Yeah. Yes, I have.
Q. Did you give those to the lawyers?
A. Yes, I have.
Q. Did you do that a couple of days ago?
A. No, some time ago. A few weeks ago.
Q. Do you know why we haven't received those new calculations?
A. No, I do not.

N.T. 10/20/2010, P.M. Session, pp. 85,86.

The witness repeated the testimony as to Ms. Roszak's erroneous inclusion in response to questions by the Court.

THE COURT: Why do you believe that—why do you believe and why did you communicate to counsel that Ms. Roszak was not properly included in Area 1 and Area 2?

THE WITNESS: I think there was just a general miscommunication between us as to who was in which area.

THE COURT: You believe that Ms. Roszak should have not been properly included in Area 1?

THE WITNESS: I believe that her—that is true. I think she should not be.

THE COURT: Well, let's go back. Just so we can define the specific parameters of what is included in Table 1. What type of study is Table 1 as described in the document D-2099?

THE WITNESS: Table 1—sorry. Table 1, Target Area 1 refers to the enumeration of cases in an ecologic study.

THE COURT: And you believe that Ms. Roszak is not properly included in Target Area 1 in your ecological study?

THE WITNESS: Yes.

N.T. 10/20/2010, P.M. Session, pp. 96-97.

Plaintiff's counsel argued during a sidebar that Dr. Neugebauer was mistaken and that Ms. Roszak should have been included.

THE COURT: Does Roszak belong in the analysis under an ecological study?

MR. FREIWALD: She does.

THE COURT: Well, then why is he confused about it?

MR. FREIWALD: I can't go talk to him so I can't explain that. Other than what I'm suggesting and I think he

will figure it out when he goes and looks. He is showing him a letter that he didn't create, and I'm not saying this is unfair.

THE COURT: He created the issue by saying that Roszak doesn't belong there.

MR. FREIWALD: But he's wrong about that.

THE COURT: He created that issue.

N.T. 10/20/2010, P.M. Session, pp. 90-91.

Because of the importance of this issue to the methodologies of Dr. Neugebauer's calculations and the prior testimony regarding other issues of methodology and Plaintiff's counsel's representation to the Court, this Court thought it best to adjourn Court to allow for any confusion, prior to the next Court day.

THE COURT: All right. I can honestly represent to the parties and the jury based upon the conversation that I had at sidebar with all parties that there may be an honest mistake of fact and I'm going to allow the parties time to clarify that issue.

We're going to adjourn for the day. And, Doctor, without allowing you to have communication with counsel, which I am again prohibiting, I am directing you to review your notes during the recess, the adjournment, and to look at the data.

THE WITNESS: Yes.

THE COURT: And to ask again the question of whether or not Ms. Roszak's inclusion in Area 1 is proper or, based upon what you've just told us, is improper. And I think you need to go back and look at some more of the supporting data which may have been present at the time of your original conclusion and determine if anything had changed your mind about the inclusion.

THE WITNESS: Understood.

THE COURT: And I'll give you that latitude because it has been a long couple days and there is a lot of information. We're all human and we're all subject to making human mistakes.

THE WITNESS: Thank you, Your Honor.

N.T. 10/20/2010, P.M. Session, pp. 99-100.

The doctor was allowed to e-mail both counsel any changes in the Roszak position by agreement of counsel.

MR. VAN WART: Your Honor, my only concern is—I don't want to waste the jury's time in the morning—is if we can get notice, and I wonder if the Doctor is—if he can send one e-mail but it has to be to both sides simultaneously, giving us whatever the explanation is so we have it in

advance.

THE COURT: Do you have the capability of doing that?

THE WITNESS: Yes, I do. I need their e-mail addresses.

THE COURT: Is that all right with you, Mr. Freiwald?

MR. FREIWALD: That's fine.

N.T. 10/20/2010, P.M. Session, p.102.

When the trial resumed the next morning, Plaintiff's counsel retracted his assertion that Ms. Roszak had been properly included in the study in Area 1 and Area 2.

MR. FREIWALD: I want to correct something. I said something on the record that--

MR. VAN WART: I would like to talk first about what happened with Dr. Neugebauer. That's part of the issue here.

MR. FREIWALD: I said something to the Court yesterday that I need to correct, because I said—

MR. VAN WART: It's a little bit late.

MR. FREIWALD: Can I just say this?

THE COURT: We are on the record. Go ahead.

MR. FREIWALD: When we went to sidebar I said that I believed what the witness was testifying to at that moment was a mistake—about their being a mistake.

THE COURT: I remember.

MR. FREIWALD: I was partly right and I was partly wrong; innocently, that is, not with any intention.

The Roszak case—I went back to the office last night and checked the inclusion of Roszak in the Target Areas 1 and 2 of this first study that is in his 2008 report, and she is on the map in the location that I said, but she shouldn't have been included in that target area because the data for diagnosis—the data for diagnosis, I believe, is not within the '96 to 2006 parameters for that study.

N.T. 20/21/2010 A.M. Session, pp.5-6.

After Plaintiff's counsel's retraction, it was revealed that Ms. Roszak never resided at the address listed and that it was her parents' residence that she visited occasionally. (See below). More disturbing to the Court was that Dr. Neugebauer did not limit his review to the Roszak issue as directed by the Court but went on to make 21 changes in his Report of various types.

THE COURT: If you have four people and you are basing your SIR on four cases and you lose one, you have a

25 percent reduction.

It's more than—

MR. FREIWALD: In those two study areas.

But in those two study areas we are not expecting to see cases because those are outside the contamination areas.

And that's verified by the cancer registry study that comes along and provides the definitive—

THE COURT: I am going to let the witness bear the burden of supporting his opinion.

MR. FREIWALD: I understand that.

THE COURT: One of the reasons I didn't want there to be any communication—not that I doubted your integrity, but in a situation where the impeachment has gotten to the level that is now, it raises a lot of issues for the Court.

Mr. Van Wart?

MR. VAN WART: Your Honor, it is much, much worse than what Mr. Freiwald just described.

The doctor submitted a report this morning between 7:00 and 8:00.

He has 21 changes to his analysis.

Twenty-one.

Now, in his analysis, the original ecological analysis that gets everybody up in arms, now three of the four areas are not statistically significant.

His cohort analysis, which he testified to on the stand, now that is not statistically significant.

He is moving people in and out.

A lot of changes.

And then he just sent us at 8:24, I think it's about 20 attachments—60 attachments.

So he is—basically he has been up all night essentially redoing his analysis.

And so, it seems like the only remedy at this point is to strike his opinion altogether.

It is an affront to the Court.

And in what makes it worse is that he testified unequivocally that he already had informed Mr. Freiwald about these problems and we were never given any warning about that.

And Mr. Freiwald continues to make misstatements about even Miss Roszak.

Miss Roszak never lived in McCullom Lake Village.

She only—Dr. Neugebauer's criteria for inclusion in his study is you either had to live there or you had to work there.

THE COURT: What was presented as an address and residence?

MR. VAN WART: She visited her parents on

weekends because her parents were sick. She never lived there.

And, so, even though she didn't meet the inclusion criteria, he still puts her in there.

And, so, for Mr. Freiwald, he said it to you yesterday, that she lived there, that is just absolutely false.

And there were problems with these other cases they are including.

So we ask the Court to strike Dr. Neugebauer's opinion.

And we are compromised because now we are getting—not even at midnight, we are getting it two hours before he is supposed to take the stand—a brand new analysis.

We don't know all of the details of all these attachments that he has given us.

And counsel had notice of these changes, and it only came out on cross-examination that he had had this information and he was sitting on it and just hoping that we weren't going to get into these issues.

N.T. 10/21/2010, A.M. Session, pp. 9-12.

The Court conducted a voir dire of Dr. Neugebauer and at its conclusion the Court struck the Doctor's testimony in its entirety.

THE COURT: All right.

With respect to the Motion to Strike, I am going to grant the motion.

Having heard the Doctor over the last two days, the troubling aspects of his report surfaced both subtly and in more immediate ways, and the events of yesterday afternoon became—were troubling to the Court, and it caused me to review some of the earlier testimony of the Doctor, and it gave me no pause in my analysis that his report was troubling.

It is as close as I have come sitting on the bench for 20-plus years, to having a report that may be tantamount to fraud on the Court, and I will not allow this testimony to continue.

Do you have a motion, following my motion to grant to strike?

N.T. 10/21/2010, A.M. Session, pp. 51-52.

Plaintiff immediately moved for a Mistrial and Defendants subsequently moved for Judgment in favor of Defendants.

MR. FREIWALD: I would move for a mistrial, Your Honor.

MR. VAN WART: We need to confer, Your Honor.

N.T. 10/21/2010, A.M. Session, p.52.

* * *

MR. VAN WART: Your Honor, we oppose the motion for a mistrial, and we ask the Court to enter judgment in favor of Defendants, because the Plaintiff has no viable causation evidence and they should not be allowed to benefit from either their misconduct or from the nature of the evidence that they put forward. And to enter a mistrial at this point would be to reward them for having assembled a case that includes evidence, such as Dr. Neugebauer's.

So we ask that the Court not declare the mistrial, but enter judgment in our favor.

And then, in addition, we ask that the Court order Dr. Neugebauer to preserve his computer for forensic review so that can see if there is some additional evidence that bears on the potential issue of misconduct.

At this point, Your Honor, we are close to the finish line.

The Jury—if the Court is not going to be entering judgment in our favor, which I think is the appropriate outcome, let's finish the case, get it to them by next week. The Jury should be instructed about the nature of Dr. Neugebauer's evidence and that they are not to consider it in any way as evidence supporting the claim of a cluster in McCullom Lake Village.

MR. FREIWALD: First of all, I heard things from Dr. Neugebauer today that I am hearing for the first time.

I don't know what he is talking about, sending any new calculations to me, and I don't accept that. And that's as far as I know, something that is a complete—

THE COURT: There's a switch underneath.

MR. FREIWALD: Do I need to go back over what I said?

THE COURT: No. I heard what you said.

MR. FREIWALD: I don't know what, really, these changes are that have been presented to me this morning.

I don't know—I can piece together some of them, but I don't understand it, and I don't know what happened.

I don't know what he was doing last night all night.

I have a package of these tables I haven't even looked at.

I mean, I don't know—I don't really understand this myself.

So, to the extent that the report is changed—and, obviously, it is—it is not something that I can really speak to.

So the misconduct issue is not, as far as I am concerned, credible from this witness.

I am saying that this expert is not credible on that issue. I don't even know what he is talking about.

THE COURT: I don't think he does, either.

MR. FREIWALD: That very well may be, Your Honor.

THE COURT: It was quite obvious during the last two days that—quite honestly, I am questioning my earlier decisions regarding allowing him to testify.

But that's water over the dam, and if I revisit it, it will be in another context.

N.T. 10/21/2010, A.M. Session, pp. 53-56.

This Court deferred ruling on this issue but considered the importance of the epidemiological evidence to the case.

THE COURT: The issue of a mistrial at this stage of the trial is, of course, not one to be taken lightly given the investment of time by the parties, and the Court, and this Jury

* * *

But, because the epidemiological opinion is crucial, and may be the most crucial evidence in this case, I don't believe it is something that can be ignored in its absence, or something that I can reasonably expect the Jury to ignore.

N.T. 10/21/2010, A.M. Session, p. 53.

In light of the preceding events, this Court decided to discharge the Jury:

THE COURT: With respect to entering judgment, I cannot do that now.

And I am going to ask that you submit a formal written motion to enter judgment, and I will give you the opportunity to respond.

The motion will be due in 10 days, and your response is due in 10 days thereafter.

I will be discharging this Jury.

The issue is whether the termination of the trial is by mistrial or by judgment.

And I am not in a position to make that decision now, nor—I think it is such a weighty decision that—I need to have time and some separation; because my immediate emotion is based upon what I concluded was a direct intention to defraud this Court by that witness.

I don't want to respond being subject to the emotion that I have now.

So I need some time and distance to be a little bit less

passionate about the issue.

But the issue will turn on the evidence, or lack thereof.

And I will make the decision in a timely manner.

N.T. 10/21/2010, A.M. Session, pp.59-60.

When the Court discharged the Jury, the evidence that remained to be offered by the Plaintiff concerned the testimony of their Expert, none of whom had offered specific causation opinions in their Expert Reports by which they were bound at trial.

Dr. Zanetti, was an employee of EnviroComp Consulting, Inc. and he prepared a Report for the Plaintiff in this case:

> The law firm Layser & Freiwald, P.C., retained the services of Dr. Paolo Zannetti and his company EnviroComp Consulting, Inc., ("EnviroComp) for this case. Under this retention, Dr. Zannetti and his associates were asked to read and review relevant documents and reports, and understand the scientific aspects of this case. In particular, this effort regards the atmospheric emissions and transport of vinyl chloride (VC) attributable to operations at the Rohm and Haas chemical plant in Ringwood, IL to the residences occupied by Plaintiff Mr. Franklin D. Branham over the years 1962 through 1997.

EnviroComp Consulting, Inc., Report of November 1, 2008, p.3.

Dr. Oberdorpher was also an employee of EnviroComp who provided an Expert Report which opined on the emission from the groundwater plume.

> The purpose of this study was to determine a conservative, "upper-bound" estimate of the emissions rate to air of vinyl chloride (VC) from a groundwater plume emanating from the Rohm and Haas facility. In a July 2007 document presented as Appendix D to an EnviroComp report entitle *Modeling of Atmospheric Emission and Transport of Trichloroethylene (TCE), 1,1-Dichloroethylene (1,1-DCE), and Vinyl Chloride (VC) in the McCullom Lake Area, IL,* this author present emission rates for both high and low scenarios for the emissions of three volatile organic compounds (VOC's). Since that report, Dr. Charles Andrews has produced an alternative, lower-bound number. This report will only present the upper-bound estimates of emission rates for VC based on the high scenarios reported on earlier.

EnviroComp Consulting, Inc., Report of November 1, 2008, Appendix D., p.1.[3]

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3. The references to these experts is not to be inferred as a ruling on the admissibility of their respective reports since it is not clear that Dr. Zanetti's opinion is legally competent on its own.

McCullom Lake Village, where the Plaintiff

The remaining witness, Dr. Ginsberg, is identified as a toxicologist by profession and produced a report identified by him as a "toxicological review and analysis of the brain cancer case of Franklin Branham." (Unnumbered page of his report of 10/25/2008. [4]

In the initial pages of his Report, Dr. Ginsberg lays out the basis for his later conclusions as to Mr. Branham's tumor.

> My toxicology evaluation focuses upon whether the environmental contamination stemming from Ringwood Illinois and present in McCullom Lake Village during Mr. Branham's residence could have been a causative factor in the development of his brain tumor. I have relied upon data available in reports developed by Dr. Andrews and Dr. Zannetti that document modeled concentrations of airborne VC at Mr. Branham's two homes in the village stemming both from outdoor air releases and from the use of contaminated groundwater at these addresses. My central finding is that Mr. Branham's exposure to VC and related solvents while living in McCullom Lake Village for 36 years was a key contributing factor in the development of the glioblastoma multiforme he developed at age 63. This finding is based upon his exposure history (levels of exposure, length of exposure, latency period), the potency of VC to induce brain cancer, and the finding of a brain cancer cluster in this community of which Mr. Branham is a part.

Ginsberg Report dated 10/25/08, pp.3-4.

The . . . "finding of a brain cancer cluster in this community of which Mr. Branham is a part" was and is an integral part of his conclusion. This is Dr. Neugebauer's conclusion, which has been discredited.

Having now concluded that the remaining evidence that could have been produced by Plaintiff would not be legally competent to establish causation and therefore liability against Defendant, and having previously found that Dr. Finklestein's and Dr. Neugebauer's expert

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> resides, is more likely than not affected by preferential wind flows from north to south due to channeling and nighttime drainage flow (downslope). These preferential flows would increase the air pollution impact at the McCullom Lake Village.

EnviroComp Consulting, Inc.,Report of November 1, 2088, p.8."Summary of Opinions of Dr. Zanetti."

4. A reference to this expert is not to be inferred as a ruling on the admissibility of his opinion in light of this court's instant contemporaneous findings.

opinions are not legally competent to establish causation and therefore liability against Defendant, the Motion for Compulsory Non-Suit is granted and this matter is dismissed.

A Motion for Sanctions based upon the alleged misconduct of Plaintiff's counsel in conjunction with his Experts, will be addressed by separate findings in due course.

BY THE COURT:

April 27th 2011

DATE

Tereshko

ALLAN L. TERESHKO, J.

cc:

Liaison counsel

Aaron J. Freiwald
Samuel W. Silver/Nilam Sanghvi