SUPREME COURT OF NOVA SCOTIA

Citation: Tingley v. Wellington Insurance Company, 2010 NSSC 465

Date: 2010/12/29
Docket: Hfx No. 115328
Registry: Halifax

Between:

Patricia M. Tingley, Kelli L. Smith, Todd A. Smith and Margaret M. Burton

Plaintiffs

v.

Wellington Insurance Company, a body corporate and Larry D. Hay

Defendants

Judge:	The Honourable Justice A. David MacAdam
Heard:	(119 days), in Halifax, Nova Scotia
Written Decision:	December 29, 2010
Counsel:	Kevin A. MacDonald, for the plaintiffs Jocelyn M. Campbell, Q.C. and W. Harry Thurlow, for the defendants

By the Court:

THE EVENTS OF SEPTEMBER 1991

The Plaintiffs' Account

[1] In September 1991 the plaintiff Patricia Tingley, then known as Patricia Smith, was living in Dartmouth, NS, and working as a rehabilitation specialist in Dartmouth and Sydney. While she was in Sydney, her two children, the plaintiffs Todd Smith and Kelli Smith, stayed with their father, her former husband Philip Smith. Her Dartmouth residence was a house at 150 Silestria Drive. Her brother, Kim Tingley, lived in the basement.

[2] In the early hours of September 20, 1991, Kim Tingley returned from work and discovered a break-in had occurred. He called his sister, who was in Sydney. Ms. Tingley testified that her brother told her he had called the RCMP, and that he later called back and advised her that RCMP officers had gone through the house. He told her that there were items missing. Ms. Tingley said a member of the RCMP advised her that it was not necessary for her to return home.

[3] On October 27, 1990, the defendant Wellington Insurance Company had issued a policy on the house. Ms. Tingley said she called Wellington from Sydney and advised them of the break-in. She testified that later in the week, before returning to Dartmouth, she spoke to the defendant Larry Hay, the adjuster, who wanted to know when she would be back in Dartmouth, so that he could visit the house with her.

[4] When Ms. Tingley had arrived in Sydney there was a phone message in which a woman had said Ms. Tingley had ruined her life and was threatening to get her. Ms. Tingley said she played the tape of this threat to a number of people, including Margaret Burton, one of the other plaintiffs, a Sydney police officer and two of her sisters. The police officer and one of her sisters did not appear to take it seriously. She also said she told Mr. Hay and the RCMP officer she spoke to from Sydney, neither of whom appeared to take it seriously. She said she later in the week, in using this tape in her work, had taped over and thereby erased the death threat.

[5] Both Todd and Kelli Smith testified that they noticed an unusual smell on entering the house with their father the morning after the break-in. Ms. Tingley went to the house with the children when she returned to Dartmouth. She said she could smell and taste something, and said there was burning in her eyes. The children said that nothing stood out to them at that time. Ms. Tingley found that some clothes were dark and wet, some had yellow stains, and some had grey and brown stains. Kelli Smith described spots and stains on her clothing, yellow stains on the carpet and stains on her bedroom wall.

[6] On entering the home the morning after the break-in, Mr. Smith said he saw muddy footprints but did not notice any stains or spots that day. He said they appeared later, but he could not say precisely when he first noticed them. He said the house was a mess. He said he saw a fog, a haze, or a mist, rising half a foot over the carpet. He had not seen it before nor has he seen it since. Mr. Smith did not recall if there was white powder on any of the clothes, nor did he recall noticing Ms. Tingley's dresser being wet.

[7] Ms. Tingley testified that within a day or two of her return to Dartmouth Todd was cranky and had a running nose and a high fever. She ran a bath for him. She heard an "ungodly scream," and he came out of the bathroom, naked, screaming and crying about his feet, which she said were red and swollen, up to four to six inches from his ankle. Todd Smith's evidence was that his feet burned intensely as soon as they hit the water. He could see a line where his feet burned. He testified that the socks he had been wearing before the bath had been in the bottom drawer of his mother's dresser. Ms. Tingley said that earlier in the day she had washed clothes, including a stained grey sweater. She said the water turned grey when she washed the sweater and after drying it, she had washed it again. She said she put the sweater in a bag as they left for the hospital. She testified that when a nurse in the ER picked up the bag, she dropped it because it was hot. She said the nurse then called Poison Control, who took it away.

[8] Mr. Smith did not recall anything unusual about the socks he put on before his feet allegedly turned red in the bath. He did not recall what his symptoms were when he arrived at the IWK, or whether his feet were still red. He said the doctors did not take him seriously, and he thought Dr. Grover and Dr. Morton "blew him off". He recalled taking a shower, but he was not sure whose idea it was. He did not recall his feet burning in the shower.

[9] Todd was examined by Dr. Grover in the Emergency Room. It happened that his pediatrician, Dr. Morton, was in the emergency department at the time. Ms. Tingley said the doctors asked what had happened and, after she told them, they said that as they did not know what the substance was, they could not treat him. Ms. Tingley said she was told they should remove their clothes and take showers. They were told to leave their clothes and were given hospital pajamas to wear when they left the hospital.

[10] Despite some difference as to the sequence of the showers, the evidence of all three witnesses was that it was not until Todd took a shower that there was a problem. Ms. Tingley said that after Todd showered, he complained of his skin burning. When she tried to dry him off, it looked like “charcoal grey” skin was coming off his body. According to Mr. Smith’s evidence, a film came off his skin, which she first noticed on his arm and his side. Ms. Tingley testified that no one responded to a call for help. She said they left the hospital without speaking to anyone else. Todd Smith recalled leaving in hospital flannels, without speaking to doctors or nurses. Ms. Tingley said Dr. Grover had told them not to go back to the house and so they went and stayed with a friend, Donna McKay.

[11] Three documents were tendered in evidence relating to the emergency room visit: the hospital record, a printout delivered to Ms. Tingley by a nurse at Poison Control, and the Poison Control record. Under the heading "History and Clinical Findings", the emergency room record states; “[h]istory of pesticide being sprayed in the house. Brought in for decontamination. No abnormal findings.” The attached notes, apparently by a nurse, state, in part:

> Sept 30/91 @ 2120 Mrs. P. Smith arrived with 2 children stating that her house had been broken into and sprayed with? contaminate. Could of been at least 1 week ago, only returned to house 3 days ago. No systemic symptoms other then skin burning when water applied. Spoke with P.C. and Dr. Grover both recommend frequent showering until identified.
>
> (2200) Placed in Pl. Room. No obvious skin irritation noted. No C/O discomfort, rashes, etc. Med. to see.
>
> (2250) Dr. Grover has examined pt. Mom requests that child be able to shower before returning home. (to decontaminate skin).
>
> (2330) Shower completed no skin irritation noted. D/C home mom.

[12] As to whether Todd had a burning sensation when he took the shower at the IWK, Ms. Tingley said on cross-examination that she was not sure. On direct examination she had testified that he had a burning sensation. She later added that

she "vaguely" remembered that there had been a slight burning. After being referred to the Poison Control records, she said she believed Todd had experienced burning in the shower.

[13] Ms. Tingley testified that she had one experience of a burning sensation on her own skin after the break-in and before the visit to the IWK. She had put on a flannel nightshirt from her dresser. It was dry and looked normal. The burning was localized to her mid-back. She said the irritation on Todd's feet was like a bad burn, while hers was a chafing, like a carpet burn.

[14] The first Poison Control document is entitled, "POISINDEX ® SUBSTANCE IDENTIFICATION". Among other things, it refers to "PESTICIDE, WATER REACTIVE, CONTAINING MANGANESE ETHYLENEBISDITHIOCARBAMATE (MANEB) (DOT)". In the Poison Control record, the third document generated that evening, under the heading "Comments; Misc. Info," it is indicated that Ms. Tingley and the children "have been exposed to? Pesticide," and adds the notation "rotten wood smell [illegible] when skin gets wet, burns & turns red." Under the heading "Progress Notes", the following entries appear (among others):

> F/u 2125 - Advised Mom that PCC best guess is that substance is a pesticide that is water reactive but no ways know [without] analysis, name of company & products. Given Mom 1-800 # for Ortho Co. to perhaps get more info on product.
>
> .....
>
> F/u 2200 Constable Marando, RCMP Cole Harbour calling re: Smiths situation. Asking about possible kind of product. Advised PCC guess is a pesticide - gave chemical name of water - reactive pest. containing manganese that is attached to give to their lab for testing as a possibility. Advised that lab could call PCC in AM. for info on possible other substances that they could test for. Constable Marando asking if plastic bags are adequate for samples of articles - yes. - PCC advised use gloves. Call pm. Thanks.
>
> F/u 2220 Dr. Morton calling re: Smith family. Mom claiming PCC advised her to be treated here @ IWK [with] showers, etc. - PCC stated that we did not advise treatment. - ok.
>
> F/u 2330 Family all showered - no burning or redness! Given IWK pajamas to wear home. No adverse effects noted. D/C'd [discharged] home.

[15] Ms. Tingley said that she felt poor at the hospital. By the time they arrived at Ms. McKay's house, she was ill, with headaches, earache and a sore throat. Todd said he was tired and having headaches and breathing problems as well, she testified. On cross-examination Ms. Tingley agreed with her statement on

discovery that Kelli had told her and the doctors at the IWK that she was not experiencing any ill effects.

[16] Ms. Tingley testified that while she and the children were at the IWK, Donna McKay, who had been visiting them, went to the house with an RCMP officer. The officer took pieces of clothing, and the back of the dresser from the master bedroom from which Todd had gotten the socks. The back of the dresser was wet. The items were examined by Michelle Holzbecher of the RCMP Forensic Lab, Toxicology Section, who was unable to identify any substance.

[17] Ms. Tingley testified that after they went back to Ms. MacKay's home, two RCMP officers arrived, and she went with them to 150 Silestria Drive. She said she began to cough, experienced burning eyes and noticed a smell when she entered the house. She said she asked the officers, Constables Emberley and Turner, whether they smelled or tasted anything, to which they said no. Upstairs she showed them a sweater that had a white powder on it. She said one of the officers said it looked like discharge from a fire extinguisher, while the other said it looked like an excess of laundry soap. She said it was not laundry soap, and that there was no fire extinguisher in the house.

[18] Later Ms. Tingley met with Larry Hay, the adjuster. She testified that she told him to contact the doctors, the RCMP or Poison Control, and that she offered him a copy of the printout from Poison Control and the IWK records. According to Ms. Tingley, Mr. Hay said he did not want this information, insisting he was not involved in a health issue, only a break-and-enter. Ms. Tingley said she told Mr. Hay about the stains on the walls and on her clothes. She said he "blew her away", got "very rude" and was "disrespectful and bullying." The meeting lasted between 45 minutes and an hour, during which, she said, Mr. Hay only seemed interested in what was missing. She testified that he said it could be done "the hard way or the easy way." She agreed that he approved their moving into the Cambridge Suites Hotel, rather than returning to the house. When she asked him what he would do about the clothing and the walls, he said they could be washed. She said she told him she wanted the house tested. She agreed that this conversation could have occurred in either her first meeting with Mr. Hay or her second.

[19] Ms. Tingley said the Poison Control printout was given to Mr. Hay and to the RCMP. On another occasion, she said Mr. Hay would not take it when she offered it to him.

[20] Ms. Tingley described a second visit by Mr. Hay, when Constable Rice of the RCMP was also present. She said she had found more clothing with substances on it. Constable Rice contacted the crime lab, which indicated that it was not possible to come to the house due to workload. Ms. Tingley said Constable Rice told Mr. Hay that the house should be tested, and that anything that could absorb chemicals or substances should be replaced, including linen, bedding and clothing. She said Mr. Hay told Cst. Rice not to tell him how to do his job, to which Cst. Rice responded that he was just reporting what the crime lab had said.

[21] Kelli Smith recollected a meeting with Mr. Hay and Constable Rice in which her mother explained what was missing, Mr. Hay only appeared interested in the missing things. She recalled Mr. Hay saying "we can do it the easy way or the hard way," and refusing to follow the RCMP advice. On cross-examination Ms. Smith agreed she was incorrect when she testified that her mother told Mr. Hay and Constable Rice about the sweater and the IWK, because it had not happened by the time of the meeting. Neither Mr. Hay nor Cst. Rice's evidence supports this account. Cst. Rice is now deceased, and his discovery evidence was admitted on consent.

[22] On cross-examination, Ms. Tingley was referred to notes, apparently made by Mr. Hay, dated October 2, 1991, which appear to refer to a phone call between herself and Mr. Hay. The notes described the house as "polluted" and refer to skin burning and the need to "get the toxins analyzed". It referred to the RCMP removing the back of the dresser and the sweater being deposited with Poison Control, as well as involvement of Public Health authorities. There are also notations which say "fungicide and pesticide manganese"; "time release chemical concentrated"; "water reactive"; and, finally, "she is more concerned with health than house right now" and "hold off cleaning until we know what it is". Ms. Tingley testified that the notes were "pretty accurate". She did not know if the references to fungicide, manganese and pesticide came from her or from the RCMP. She assumed that she told Mr. Hay in October that it was a pesticide, fungicide manganese, and that manganese was only a suggestion.

[23] A later note, timed at 4:10, apparently on the same day, refers to a call from Ms. Tingley indicating that Bob Jeans, apparently of the Atlantic Health Unit, had suggested "do air sample". On cross-examination Ms. Tingley said she did not recall the name "Bob Jeans". Ms. Tingley said she "assumed" that Mr. Hay would

be doing "air quality testing." She said Cst. Rice told Mr. Hay that the RCMP Crime Lab had said that he should do "air quality tests." She agreed that there was no record of this in the RCMP files.

[24] Ms. Tingley said she notified Mr. Hay that before the house was cleaned it had to be tested, and he would have to arrange the testing. She testified that she told him she could not afford to pay for the testing, and he said he would do it. She said she wanted "air quality" testing, based on what she was told by the Department of Health. Ms. Tingley said she provided Mr. Hay with the names of companies that could do the testing, but he decided to use Nova Scotia Research Foundation (NSRF). She said Mr. Hay indicated he was not sure whether he would do it and she responded that the house would not be cleaned without testing. She said she took this position because of the sickness that Todd had suffered. She said she took him at his word that he would have the appropriate testing done. She understood the first thing they wanted to test was clothing, and she provided selected items to Mr. Hay. She assumed that the second step would be "air quality testing."

[25] Ms. Tingley testified that Mr. Hay called and said Nova Scotia Research Foundation wanted examples of stained clothing. She said she gave him various items, including a blouse with an oily grey stain. Later, when Donna Strong, Mr. Hay's supervisor, was at the house, Ms. Tingley asked about these items, and Mr. Hay said he did not think he had gotten them back from Nova Scotia Research Foundation. Ms. Tingley said Ms. Strong told him to pay her for these items.

[26] Ms. Tingley said she was not present when Michael Robicheau, of Nova Scotia Research Foundation, came to inspect the house. She said she later heard from Mr. Hay that the results had come in and that the house was "safe to be cleaned." She said she asked for a copy of the test results, which she said she did not receive. According to Ms. Tingley, Mr. Hay said it appeared that the substance involved was urine. She said it did not smell like urine. On cross-examination, Ms. Tingley said Mr. Hay told her that "everything was fine," but did not use the word "safe." She maintained that the Insurance Company told her the house was safe, that she believed this, and she and the children moved back in as a result.

[27] Ms. Tingley said she believed that she and the children moved back into 150 Silestria Drive on Halloween, 1991. She said she soon began to experience some of the same symptoms she had experienced after the break-in. She said she called

Mr. Hay, who said the house was clean and safe and that her symptoms were probably related to materials used by the cleaners. Her symptoms continued and became worse. She said she asked Mr. Hay about the testing and about the cleaning, and he responded that he would not do any more testing or cleaning of the house, or cleaning of clothes, and that her sickness was not his concern. Ms. Tingley testified that she developed bladder problems, and that she and Todd had rashes, outbreaks on their lips, runny noses and bleeding. Nevertheless she signed off on the insurance claim.

[28] After the house had been cleaned, the carpet spot-cleaned and clothes cleaned, Ms. Tingley was still unsatisfied with the condition of the house and its contents. Around November 1991, Ms. Tingley testified, she contacted a manager at Wellington and arranged for Mr. Hay and Ms. Strong (a senior official at Wellington) to come to the house. Her friend, the plaintiff Margaret Burton, was also present at this meeting. Ms. Tingley showed them stained clothing that she wanted replaced. Mr. Hay asked for receipts. Ms. Tingley said she requested a lump sum for her clothes and bedding, and Kelli's clothes. She said Mr. Hay offered $2500, then $3500, which she accepted because she was "hitting [her] head against a brick wall." On cross-examination Ms. Tingley was referred to handwritten notes of Ms. Strong, dated November 4, 1991, which included a list headed “problems”, numbered 1-7. This list included the notations “House not cleaned properly”; “carpet had to be cleaned twice”; “chemical is still in the carpets [and] on walls”; “stereo wasn’t delivered in time for guy to hook it up”; “Scotch Guard wasn’t done properly”; “says there is semen all over her [daughter’s] window”; and “Both [Pat’s] and her [daughter’s] clothing aren’t salvageable not cleaned properly”.

[29] Ms. Tingley said she and Kelli showed Ms. Strong and Mr. Hay stained clothes, including a pair of Kelli's jeans, which Mr. Hay said could still be worn. Kelli began to cry, and Ms. Tingley asked Ms. Strong, "are you going to do anything?" They then went upstairs and she pointed out a stain on the wall that the cleaners had not been able to remove. She described it as a "grey oily stain" seeping through the wall. She said Ms. Strong told Mr. Hay to have it cleaned. She showed them stains on a wall in Kelli's room as well. She said the stains could only be seen at a certain angle or when the lights were on; the wall was full of shiny spots. On opening the blind in Kelli’s room, she said, they saw a stain on the window which Mr. Hay said looked like semen. Ms. Tingley said Ms. Strong told Mr. Hay to have the windows cleaned and the room and other areas painted.

[30] Todd Smith said he saw spots on the carpet and walls throughout the house after the break-in and before the visit to the IWK, Ms. Tingley agreed the stains disappeared when the cleaners washed them off, but said they reappeared later and could be seen in certain light or from certain angles. Todd Smith also said the stains reappeared after the cleaning.

[31] Ms. Tingley said she brought up the plaintiffs' health problems on an occasion when Ms. Strong and Brian James were at the house. Mr. James owned James Proper Care, the company that Mr. Hay engaged to clean the house. Ms. Tingley told Ms. Strong that she had blood in her urine and masses in her breasts, to which she said Ms. Strong responded that she had problems with her own breasts and that the other issue could be an infection.

[32] After November 1991, Margaret Burton, would occasionally stay at the house. Ms. Tingley said Ms. Burton never lived at Silestria Drive on a permanent basis. She said she did not recall Ms. Burton staying longer than seven days on any one occasion. Ms. Tingley said she and the children were sick, and Ms. Burton became sick as well as turning "yellowish orange."

[33] Ms. Tingley identified several occasions when she told Mr. Hay, or someone else at Wellington, that she was having health problems that she attributed to toxic chemicals in her home, including when she went to Ms. McKay's after leaving the IWK, and when she told Mr. Hay she was sick when she requested hotel accommodations. She said that after moving into the hotel, she informed Mr. Hay that Todd was having breathing problems, and that she was experiencing headaches, diarrhea and severe thirst. He agreed to an allowance for additional fluids. She also said she told him she had a rash from her nightshirt, and that when she moved back into the house, she had a runny nose and blisters on her lips. Mr. Hay replied that these symptoms resulted from the cleaning.

[34] Ms. Tingley said Mr. Hay knew about the blood in her urine, headaches, and bladder problems shortly after they returned to the house. She said she told him about her bladder problems in 1991 or early 1992. She testified, on cross-examination, that prior to October 2, 1991 she had had severe diarrhea, cramps, headaches, earaches, red ears, enormous thirst, burning in the back of her throat, burning eyes and perhaps a running nose, while the blood in her urine and bladder pain appeared later. She said that between September 28 and October 13,

1991, when they left the hotel, she also had "chills and was flushed." She said Mr. Hay knew of these symptoms in 1991 and 1992, and that he said he was "not dealing with health issues, only house issues."

[35] Ms. Tingley testified that she and the children became ill, as did Ms. Burton, who turned “yellowish orange”. Ms. Tingley testified that Dr. William Deagle, who became the plaintiffs’ family physician in 1993, told her she should not stay in the house, and that she should not remove anything from the house, so that they would not take any contaminated items to their new environment. She also said that Craig MacMullin, a chemist with Fenwick Labs, who tested pieces of carpet and paint chips from the house and provided a report listing the chemicals found, said the house was not safe for her, but might be safe for someone else. Mr. MacMullin denied making such a statement.

[36] In late 1993, the plaintiffs moved to an apartment on Forest Hills Parkway in Cole Harbour, where Ms. Burton began to reside with the family on a permanent basis. They remained in this apartment for less than a year, moving because of exhaust fumes from the highway. They moved into another apartment in the same complex, where they continued to have problems due to "off gassing” from the carpets and paint fumes. Ms. Tingley said she had seizures due to the fumes. They then went to stay with her brother, Mark, on Pelzant Street, in Dartmouth.

[37] It is appropriate at this point to review the evidence of other witnesses who gave evidence respecting the investigation of the break-in and the subsequent investigations and clean-up.

Kim Tingley

[38] Kim Tingley is Ms. Tingley's younger brother. In September 1991 he was working the evening shift at a restaurant in Halifax. He lived in Ms. Tingley's basement, which he accessed by a side entrance. He testified that on the evening of the break-in, he arrived home around midnight. His bike, which was under a window, had been knocked over, and the window had been jimmied out. He called Ms. Tingley in Sydney, and called the police. Two RCMP officers came and made observations for about half an hour. He repaired the window, ate and went to bed.

[39] In a statement to Bill Wilson of the Insurance Crime Prevention Bureau, dated April 20, 1994, Mr. Tingley gave a different description of how he came to

discover that the house had been broken into. He said he arrived home, entered through the side door, and watched television for 30 to 45 minutes, then noticed a draft, which he found to be coming from the pried-open basement window. On discovering the window was cranked out and the metal rods were bent, and that he could not close it, Mr. Tingley said he realized that the house had probably been broken into. He testified that the version in the statement was probably more accurate than the version he had given in court, since it was more detailed. The statement also referred to his bike being knocked over, without mentioning the vapour barrier being torn down. He said that for an intruder to gain access, once they opened the window, they would have needed to knock down the vapour barrier.

[40] Mr. Tingley's statement indicated that he went upstairs to Ms. Tingley's bedroom, where he noticed the dresser was pulled out from the wall and the back of the dresser was wet. He said clothes in her closet were pushed aside as if someone was looking to see what was in the closet. He agreed that the statement suggested he had noticed the dresser that night, which he had not recalled in his earlier evidence.

[41] Mr. Tingley testified that he saw stains on the walls, on the carpet below the wall stains, and on the dresser. He saw them in Ms. Tingley’s bedroom, the upstairs hallway and in the stairwell. Only the stains on the back of the dresser were still wet. He did not see a fog or a mist, nor did he smell any pesticide or urine. He did not recall an ammonia smell the morning after the break-in. He was referred to the statement he gave to the Insurance Crime Prevention Bureau, in which he said that he noticed an ammonia smell upstairs the day after the break-in. He said the statement did not help him recall smelling anything unusual the day after the break-in. He also noted that in the statement he said that Ms. Tingley had returned home in a couple of days, but it was actually eight days. He agreed that in the statement there was no mention of him being itchy. He agreed it appears in his statement that the ammonia-like smell was upstairs in the bedroom, where the clothes had been stained and the back of the dresser was damp.

[42] Mr. Tingley agreed that there were three versions of his evidence, as to whether he smelled urine: his discovery, the statement taken by the insurance investigator and his evidence in court. He could not say which was most accurate. On re-examination, he noted that in discovery he had said he did not smell urine. In the statement he said he smelled something like ammonia upstairs, which was

not a reference to urine. His evidence in court was that he did not smell urine, but an ammonia-like smell.

[43] Mr. Tingley said that when Ms. Tingley came home, she said she smelled fumes and saw stains on walls, carpet and clothing, which he had not noticed. She showed him colourless stains on clothing from a walk-in closet in her bedroom. She moved to a hotel, and he moved in with his mother. He said Ms. Tingley wanted him to move out. At the time, Mr. Tingley's opinion was that there was nothing wrong with the house. He agreed that if Constable Turner had asked him, this is what he would have said.

[44] Mr. Tingley testified that he experienced itching, probably starting the day after the break-in, and continuing for the rest of the week. He associated it with being upstairs or having a shower. He had said on discovery that he could not recall if it was he or Ms. Tingley who first had itching. After he moved out it stopped. On discovery, he had said that he had installed insulation in the basement several months before the break-in. It was exposed insulation, which caused itching similar to the itching that he testified he experienced after the break-in. However, he said that after the break-in he had itching after showering, while a shower would stop the itching from the insulation.

[45] Mr. Tingley did not recall Ms. Tingley telling him about receiving a death threat. He also did not recall being told about the IWK visit, or that anyone at the IWK said no one should live in the house. He was not aware of Paula Robbins, a friend of Kelli Smith, having medical problems after staying at the house. He recalled Ms. Tingley saying that there were items from the house tested and medical tests were done on her and the children. On discovery he had said that Ms. Tingley told him that toxins had been found in fatty tissue samples.

[46] Mr. Tingley agreed that in September 1991 Phil Smith and Ms. Tingley were arguing about the children. He said Ms. Tingley told him she suspected that Mr. Smith had broken into the house. He did not think she suggested that he was trying to murder her. He was not aware of notes in the RCMP files that Ms. Tingley had said she did not trust him, and said she never told him that she did not trust him. He said it would surprise him if Ms. Tingley had suggested he was involved in the second break-in (which he denied). He did not know that Ms. Tingley told Constable Turner that he was a compulsive liar. He denied that he would have told the police that his sister was "nuts."

Police Evidence

[47] Constable. H. Gillis, then of the Cole Harbour detachment, was the first officer on the scene, and was in charge of the file, after the call was received at 2:17 a.m. on September 21, 1991. Kim Tingley showed him where the entry occurred. Cst. Gillis said he walked through the house, including the basement. He did not see any containers outside that could be used to transport chemicals. He did not smell anything and Mr. Tingley did not say he smelled anything. He did not see any stains nor did Mr. Tingley refer to stains. He did not see a fog near the carpet. He said that when he arrived, Mr. Tingley said nothing had been taken from the house; however, Cst. Gillis pointed out that the TV and VCR were gone from the living room. Cst. Gillis said he came alone, and that Mr. Tingley was mistaken if he said there were two officers present. He said it appeared to be a normal break and enter.

[48] Cst. Gillis said he was never advised that Ms. Tingley had received a death threat while she was in Sydney. He said any exchange similar to that described in Ms. Tingley's discovery – where she said she had told him about the death threat, and he told her she did not need to return from Sydney immediately – would have been noted in the file. He also said he was not told about such a call by Cst. Gerry Rice. He denied that Cst. Rice told him that anything that could absorb chemicals should be destroyed.

[49] Cst. Gillis spoke to Phillip Smith. His notes indicated that Mr. Smith's then wife had received a call from a male who said he was out to get him and Ms. Tingley, his former wife. Mr. Smith said he did not believe that there was any poison, and that his wife had a tendency to "run off a bit with her mouth". He had mentioned a custody issue as well.

[50] Cst. Gillis's note of October 4, 1991, indicated that he spoke to Michelle Holzbecher of the Toxicology Section, and told her that he had not seen or smelled anything suspicious on the night of the break-in, and that she would "speak to Dr. Grover and if she cannot get any additional information she will be returning my exhibits."

[51] Constable Ken Turner and Constable Angus Emberley, both now retired, were in the Cole Harbor detachment in September 1991. They went to the house

with Ms. Tingley on October 2, 1991. According to Cst. Turner, at the entrance to the house Ms. Tingley said she could smell something and began coughing and hacking. She pointed out substances, but he could not see them. Kim Tingley was in the house preparing food. He said it did not bother him, and said his sister was "just crazy". In response to the information that Kim Tingley later testified that he smelled something, Cst. Turner said anything out of the ordinary would have been documented in the file.

[52] Cst. Turner said Ms. Tingley pointed out items of clothing that she said were damaged, but he did not see, smell or feel anything on most of them. One sweater showed a small amount of powder or marking. He felt it through rubber gloves, and ran it under a tap when she suggested the substance was water solvent. She repeatedly asked if he could smell the substance, but he detected nothing. There was a yellowish spot, about the size of a Loonie, which Cst. Turner thought looked like dry chemical from a fire extinguisher. Cst. Emberley thought it was detergent that had not totally dissolved. They did not find this substance on any other clothing.

[53] Cst. Turner said he did not smell anything, and he experienced no irritation while he was at the house. He said his sense of smell was "keen". The protocol when a dangerous substance was suspected was to advise the appropriate government department and leave the house. Any health complaint by an officer would require all the officers present to be tested.

[54] Cst. Turner said Ms. Tingley did not point out any stains on walls, ceilings or carpets, nor did she mention receiving a death threat on the day of the break and enter. He said the protocol in such a situation would have been to document the statement in the file. He said he would not regard a statement like "out to get you" as a death threat. If an officer believed a threat was of consequence, it would be documented in the file.

[55] Cst. Turner went to the house again on November 14, 1991, in response to another report of a break-in. On arriving, he saw a person who looked like Kim Tingley running off. The person had not gained entry. There was no one in the house. He spoke to Donna McKay, who told him that Ms. Tingley was away. He learned that Kim Tingley had been evicted. Ms. Tingley later told him the intruder was probably her brother at the house to get his things, and said he was a

"compulsive liar." When told that Ms. Tingley denied saying this, Constable Turner said you do not fabricate notes.

[56] Cst. Turner said it was his view that nothing was sprayed in the house, and he did not believe it was a legitimate break and enter. He believed some details were fabricated or exaggerated. He agreed that he thought Ms. Tingley was unstable and that he might have used terms such as "crackpot" or "nutty as a fruitcake" in subsequent conversations with Cst. Emberley. He said he might have told Mr. Hay he thought that there was nothing to support a break and enter or that anything was sprayed in the house. He said he suspected early on that the file was a fraud.

[57] Cst. Emberley testified that on October 1, 1991, he received a call from Constable Gerry Rice to take exhibits to the RCMP lab in Halifax. He took the items to the lab the next day and gave them to Michelle Holzbecher. Neither he nor Ms. Holzbecher found any stains on the items, or any wetness on the dresser. She found nothing to analyse. Cst. Emberley agreed that if the back of the dresser was saturated with urine, even if it was dry, he would expect to smell urine.

[58] Cst. Emberley went back to the house on October 2, with Cst. Turner and Ms. Tingley, to retrieve further exhibits for analysis. He said Ms. Tingley started coughing at the front door, and asked the officers if their eyes or throats were burning, to which they said no. Kim Tingley was in the house, and there was bread on the counter. Cst. Turner asked Mr. Tingley if the contamination bothered him, and he said no.

[59] Cst. Emberley went upstairs with Ms. Tingley. He said her daughter's room was a mess, and she said the intruders had not been in that room. She directed him to a bag of clothes. There was a white patch, about half the size of his hand, about 3" x 3", on a sweater. He said it looked like undissolved laundry detergent. Cst. Turner thought it was chemical from a fire extinguisher.

[60] Cst. Turner and Cst. Emberley did not seize any items on October 2, 1991. Cst. Emberley said they found no evidence of anything spread in the house. He said that at one point, Ms. Tingley answered the phone and said the Department of Health was calling with the names of companies that could analyze the air. Cst. Emberley said he found nothing wrong with the air, He said they were with Ms. Tingley for one-and-a-half to two hours. They would have finished by 4:10 p.m.

He was referred to a note in Mr. Hay's file, that read “4:10 Pat called [...] RCMP - went through the house with ins'd today - RCMP took clothing sample - white powder on it.” Cst. Emberley said they did not take any of the clothing with white powder on it.

[61] When Cst. Emberley and Ms. Tingley went upstairs, Cst. Turner spoke to Kim Tingley. Cst. Turner believed that Mr. Tingley said Ms. Tingley was a “nut case” or words to that effect. Cst. Emberley said Ms. Tingley did not tell him she had received a death threat on the day of the break-in. Other than the smell of which she complained, and the clothing in the bedroom, Cst. Emberley said Ms. Tingley did not direct him to anything else in the home that she said was contaminated. He said she did not report that anyone had seen a fog-like substance in the house, and she did not ask him to take any items for examination.

[62] Staff Sgt. Joe Marando was a constable in Cole Harbour in 1991, and was involved in the investigation. He recalled seizing exhibits, preparing them for the lab and returning them, although he did not recall the results. Staff Sgt. Marando said he went to the house after Donna McKay informed him that Ms. Tingley and the children had gone to the IWK. He spoke to Kerry Smart at Poison Control, who said the substance might be a pesticide made by Ortho, possibly water-reactive manganese. His notes include the phrases "[w]ater reactive, containing manganese, and there is ethylene, bipdithio-carbonate, carbonate herbicides and fungicides. " He said these were possibilities for what the substance might be. Staff Sgt. Marando also spoke to Dr. Morton, who did not know what the substance was and could not treat it. He said the children would be washed and released that night. He said they would be fine but they should not go back into the house. He made no comment on Staff Sgt. Marando's well-being, if he went in the house nor did he say that any clothes he had on should be destroyed. Staff Sgt. Marando said he did not have any concerns about the house not being safe. He understood that the doctor was only being cautious.

[63] Staff Sgt. Marando said he seized several items after speaking to Donna McKay, who told him the substance was on clothing and furniture, and directed him to the upper level of the house. He did not see or smell anything. He seized a dresser panel from the master bedroom, purple and white sweaters (also from the master bedroom), a pink sweater (from Kelli Smith's bedroom), a pink robe from a closet in the study and a blue towel from the linen closet. Staff Sgt. Marando said he did not see anything that looked like a foreign substance on anything he seized,

and that nothing he seized was wet. He did not recall an odour in the house, and did not notice any stains on the walls, ceilings or carpets. He did not notice any ill effects, such as coughing, and he was not aware of Ms. McKay having any ill effects. Staff Sgt. Marando did not recall Ms. McKay saying that Ms. Tingley had received a death threat on the day of the break-in. He said it would be in the file, as it would be an escalation from a property damage claim to physical violence.

[64] Constable Gerry Rice, in his discovery, said he was first at the house on September 29, after receiving a call from Kim Tingley reporting a break-in and the removal of various items, including the VCR, TV, CD player and CDs. Ms. Tingley told him that she did not trust her brother, none of whose things had been touched. On being told that Ms. Tingley denied saying this, Cst. Rice acknowledged that he did not recall this, but it was in his notes; he said she might not have said it directly, but that she would have said something that led him to believe she did not trust her brother. Cst. Rice said the talk of threats "did ring a bell."

[65] Cst. Rice said Ms. Tingley told him that she found a yellow substance on her clothing, similar to nicotine or a light burn. Cst. Rice said he could not see the marks she described, and could not smell nicotine on the clothes. Ms. Tingley wanted the police lab to check the clothes. He told her that it could take three to four months. He said he had been told by lab personnel that it would be low priority. Cst. Rice said it was Ms. Tingley who suggested there was something on her clothing, similar to nicotine or a light burn. He did not observe it himself.

Craig MacMullin

[66] Mr. MacMullin was qualified "as an expert chemist, lab technician and WHMIS instructor with training and experience in indoor air-quality investigation, operating various test equipment including gas chromatography mass spectrometry, interpreting the results, and identifying chemicals".

[67] Mr. McMullin testified that Ms. Tingley contacted Fenwick labs and indicated that samples had been taken after the break-in, but were no longer available. He understood that the Nova Scotia Research Foundation had concluded the substance was urine. Fenwick did not collect samples. This was the client's responsibility. Mr. McMullin said if Ms. Tingley could get a sample of the stained

area of the carpet and a blank piece of carpet, he could eliminate what was common to both. She also provided paint chips.

[68] Mr. MacMullin said he keyed in on volatiles, because he was told there was a smell, and he concluded that the presence of an odour indicated something volatile. In the carpet he found hydrocarbons, as he did in the paint samples, but he also found aromatic compounds, related to benzenes. The percentage that would have been sufficient for a conclusion depended on a number of factors. Independent of the percentages he found, he said none of these were found in the blank carpet he tested. In his report, he added, "since so much time has passed since the incident in question, it is impossible to tell whether other compounds not noted here were present and thus compounded the exposure." He said if there is contamination by volatiles, there is potential for evaporation.

[69] Mr. McMullin concluded from his testing that there were hydrocarbons, which could not be specifically identified. Not knowing what materials the cleaners used, he could not say that this had not come from the cleaners.

[70] As with the carpet, the percentages of the chemicals he found in the paint chips did not indicate anything about the quantities of the chemicals. He did not do any analysis to see if these were typically found in carpet or paint. Mr. MacMullin said he had no basis to disagree with Dr. Jean Gray's statement that the substances found in the carpet and paint did not surprise her, as she would have expected them to be found there.

[71] Mr. McMullin said he did not test for urine, in the carpet or the paint. He said there was a visible stain on one piece of carpet. He said he could not test for pesticides, which are semi-volatiles. The paint chips had a visible area where he could see the flat paint and a sheen on top of it. Based on his analysis, he could not reach any conclusion as to whether Ms. Tingley or the children were exposed to chemicals in their house. Mr. McMullin said he never told Ms. Tingley, or anyone representing her, that the ideal situation would be to have the house bulldozed and a new house constructed. He said he could absolutely not draw such a conclusion. He agreed it would have been ridiculous for him to have made such a statement.

Dr. Amares Chatt

[72] Dr Amares Chatt was a Professor of Chemistry at Dalhousie University. He retired in 2010. His research area is analytical chemistry, involving the detection and identification of major and minor trace elements, using neutron activation, using a "slowpoke" nuclear reactor. Dr. Chatt met Ms. Tingley in November 1991 and she provided carpet samples for analysis, which he gave to an associate, Dr. Jiri Holzbecher.

[73] Dr. Chatt said Ms. Tingley complained of allergy and fatigue. He did not think she mentioned a police investigation. He said that if she had said the police were involved, he would have recommended that she take the samples . to their lab. He did not recall her saying that there had been testing done by any other labs, nor did he remember her mentioning involvement with Poison Control. He said he would not have done the analysis if Poison Control were involved, or there would be legal implications.

[74] The only health symptoms Dr. Chatt recalled Ms. Tingley mentioning were fatigue and allergies. He did not recall hearing that anyone had reacted to carpet. Dr. Chatt said Ms. Tingley brought two small carpet samples. Dr. Holzbecher, the associate who did the analysis, reported "nothing out of the ordinary". They were looking for contamination with metal elements. The analysis indicated that the carpet did not contain any elements that the clean carpet did not have. There was no arsenic. Dr. Chatt did not recall Ms. Tingley providing a vial of grey powder or a picture frame.

Professor Tang Lee

[75] Shortly before he was scheduled to testify, plaintiffs' counsel advised the court that Professor Tang Lee would be unable to attend at trial for medical reasons. Plaintiffs' counsel applied to introduce Professor Lee's four reports, three of which commented on reports filed by defence counsel in respect of potential witnesses for the defence and an additional report outlining Professor Lee's views on the procedure for indoor air quality examination of a house. Following lengthy submissions , including references to Professor Lee's reports and discovery examinations, he was qualified as an "expert Professor of architecture and building science and indoor environmental quality capable of giving opinion evidence as it relates to indoor air quality, the proper tests and procedures pertaining to same." He was not qualified to discuss health risks arising from chemicals that may or

may not be found in buildings. His reports, with some deletions, were permitted to be filed as expert reports.

[76] A consideration of the evidence of Professor Lee must necessarily start with a letter he addressed to plaintiffs' counsel on September 2, 2004:

> Thank you for your letter of August 12, 2004 containing the report from Jacques Whitford Environmental Limited. The report refers to several laboratory anaylses of blood samples taken from Patricia Smith, Kelli Smith, Todd Smith, etc. Unfortunately I am not qualified to comment on this report.
>
> As I reviewed this case, I am at a disadvantage in formulating a definitive opinion to assist your client. The major difficulty is that I did not conduct the air sampling of the house, or even examined the house and its contents. The photographs and video tape shows some staining that can be from many other causes. This will put me at a disadvantage in making a good case. The report from OCL Services Ltd. conducted a limited air sampling of the house and in their opinion, did not find any indoor air quality problems in the house.

[77] Nevertheless some five days later, on September 7, 2004, Professor Lee provided his comments on the report prepared by Nova Scotia Research Foundation. By further letter dated January 27, 2005, he commented on the report prepared by OCL services Limited. On July 1, 2005 he provided a further report, commenting on the report of Jacques Whitford Environmental Limited of September 3, 2002. By letter dated July 3, 2005 he described a "Procedure for Indoor Air Quality Examination of a House." Nowhere is it explained how Professor Lee was now able to provide anything more than "conjecture based on secondhand reports", as he described in his letter of September 2, 2004. His comments on the Jacques Whitford report, which was not tendered at trial, are troubling in light of his own statement that he was "not qualified to comment on this report." His comments on the OCL Services Limited report, which was also not tendered at trial, are also troubling in light of his opinion, without adverse comment, in his September 2, 2004, letter that they "conducted a limited air sampling of the house and did not find any indoor air quality problems in the house".

[78] Notwithstanding his observation on September 2, 2004, apparently having viewed photographs and the video tape, that the staining could be " from many other causes", Professor Lee was prepared to state, in his September 7, 2004 letter:

> From the video taken on May 11, 1994, there was considerable evidence of chemical staining throughout the entire house including the walls, ceilings, bulkheads, carpeting, around light

> fixtures, at the junction between wall and ceiling, etc. Even from the poor video quality, it was clearly seen that some of the stains were in the shape of spots and some streaks. The stains were especially noticeable on the carpet, with clear demarcation where the chemical spills had extended. The extent of the chemical spills was clearly seen on the carpet. In some locations, the stains reached the edge of the carpet and corners of the room.

[79] On discovery in speaking about the video, Professor Lee said he reviewed it as soon as he received it. He said he only reviewed it once because in doing so he became "very dizzy". He said he thought he played back certain parts, but was unable to recall them. Needless to say, equally troubling is how Professor Lee, apparently without having again viewed the video, could say that what he was seeing were "chemical spills" when five days earlier he had said they could be "from many other causes". This is one of many troubling aspects to the reports of Professor Lee. As another example, addressing the report by Michael Robicheau, of Nova Scotia Research Foundation, Professor Lee comments:

> This one – page report from NSRFC conducted only one test on a sample taken from a blouse. The laboratory results were noted as:
>
> > "Sodium 4:Potassium 0.6:Chloride 6: Sulfate 3"
>
> It is not known what the unit of measure is. The report states that this refers to ratio of the substances in the blouse. Is this referring to a percentage of total substances found in the blouse? If so, what other substances were found in this sample as the total only represents 13.6%. This report is very sloppy and not scientifically rigorous and thus its statement is not reliable.

[80] In responding to Professor Lee's statement, Mr. Robicheau said:

> ..... for some reasons I don't understand, he doesn't understand what a ratio is and then for some reason he added them all up and made it to a percent which is more absurd to me. I'm not sure why he wouldn't have checked with one of his colleagues to ask them what a ratio was. But it's like saying in this building there's 200 men, there's 200 women - the ratio of men to women is 2 to 2. So that means there's 4% of the people in the building are men and women, what are the other 96%. It makes no sense to me. And that's fairly basic. I really don't understand why he couldn't understand what a ratio is.

[81] Mr. Robicheau was also referred to Professor Lee's letter of September 7, 2004 where he wrote that NSRF was a "laboratory for analytical chemistry" whose "primary if not exclusive service is to analyze samples brought to the laboratory." Mr. Robicheau said this is "completely incorrect". He said the Nova Scotia Research Foundation had a range of people doing a range of things. In reference to Professor Lee's comment that laboratories typically do not have the expertise or ability to conduct on-site investigations, he disagreed saying it depended on the individual lab.

[82] Mr. Robicheau responded to Professor Lee's description of "chemical staining" throughout the house (in his September 7, 2004 letter). He noted that Professor Lee's comments were based on a video that was made several years after he was in the house. He said he did not see any of this when he was in the house. He also responded to Professor Lee's comment that, "[m]ost shocking was that the only laboratory test conducted was on a sample of a blouse." Mr. Robicheau commented that he was not sure why Professor Lee would have been shocked, as this was the subject matter of the report. He added that Professor Lee might have mistakenly thought it was an air quality test.

[83] On cross-examination Mr. Robicheau indicated he agreed with some, and disagreed with others, of the comments in Professor Lee's letter of July 3, 2005. In reference to Professor Lee's comment that, "[a]s most air contaminants are odourless, colourless and tasteless, sophisticated and sensitive instruments must be used to identify the substances of the chemicals and its impact on occupant health," he said most contaminants are not odourless, colourless or tasteless. As to Professor Lee's comment that "[s]ufficient samples of the contaminated materials including building materials, furniture, clothing, finishes, must be gathered and sent to an appropriate laboratory for analysis", he agreed it would be a good idea to gather samples of contaminated materials and have them sent to lab.

[84] In his letter of July 2005 regarding the Jacques Whitford report, Professor Lee wrote:

> The Jacques Whitford report casually mentions that *trimethylbenzene* and *chloloroform* was "detected" in 1993 and 1994 but failed to consider how significantly elevated and alarmingly high levels were found in the occupant's bodies.
>
> Fig. 1 shows the level of *trimethylbenzene* in the occupants as compared to the average population. This is strong evidence that these documents were exposed to *trimethylbenzene* is sufficient quantities to have these levels in their body.

[85] A further criticism by Professor Lee is that the Jacques Whitford report "failed to acknowledge three other substances that were found elevated in the occupants blood and adipose tissue including *xylene*, *benzene* and 1,1,1-*trichloroethane*." In respect to *xylene* he stated that in Ms. Tingley it was 1.6 ppb as compared to the average population which will have less then 1.0 ppb. He then states that *xylene*, as well as *benzene* are carcinogens , use of which are strictly regulated. He added, "[e]xposure to such substances that can be detected in the body must be severe and intentional." (Italics in original)

[86] Dr. Mark Cullen testified for the defence. He was qualified "as an expert physician in the fields of occupational and environmental medicine, general internal medicine, epidemiology and the public health, capable of giving opinion evidence with regard to the diagnosis and treatment of health conditions prevalent among people with concerns about the environment, including but not limited to the diagnosis and treatment of multiple chemical sensitivity, the effects of chemicals and their impact on human health and the assessment of indoor air quality." With minor modification Dr. Cullen was so qualified. Dr. Cullen commented on Professor Lee's letter of July 1, 2005:

> The letter of July 1, 2005 describing the results in blood and fat from Accu-chem Laboratories contains many erroneous and problematic assertions that again lead me to question Mr. Lee's fundamental knowledge of environmental health. First and foremost, the presentation of blood and fat tissues tested and the discussion of the results demonstrates complete lack of understanding about how trace foreign materials are assessed in body fluids and how to interpret them. First, any meaningful evaluation of laboratory tests such as these, which are nonstandard and unvalidated (see below), requires at a minimum a careful description of the comparison population to whom values will be referenced, the circumstances under which testing was performed and the techniques for quality assurance used by the laboratory to validate reported numbers. To describe, as is done on the first page of the July 1 letter in regards to xylene 111-tricloroethane and benzene, in such terms as "twice the average population" or "higher than the average population", is meaningless. But this same approach is taken graphically on the subsequent two pages regarding blood levels of trimethylbenzene and fat tissue levels of chloroform. In reality, assuming that appropriate comparison or reference population data are available (which I believe is false) and that it has been performed in a quality laboratory (also false in my view), results are typically expressed in relationship to percentiles within reference populations. This approach is not arbitrary, but has been adopted by convention <u>because all of us have hundreds or thousands of trace exogenous chemicals in our blood</u>. The range of findings are among individuals with no known source of exposure (such as chemical-using occupation) is often ten or hundreds folds from the relatively lowest, say the 5th percentile, to the relatively highest, say the 95th percentile. Given that sort of distribution to talk about a value of two parts per billion being "twice a value of one part per billion" absent an appreciation of how the material distributes in the unexposed population suggests Mr. Lee has no acquaintance with the emerging scientific literature on biomonitoring, now at least 20 years old.

[87] In his letter of January 27, 2005, commenting on the report of OCL Services Ltd., Professor Lee wrote that despite the "lengthy offgassing period" of 18 months, the laboratory found "several substances (hydrocarbons)" in one or more of the three sampled rooms, including n-decane, n-undecane, n-dodecane, p+m xylene, 1,4-dichlorobenzene, and 2-exyhexenal. He wrote that "[w]hile these substances were low, 2-exyhexenal were extremely high in all three rooms". This substance, he wrote, was an "oxygenated component that is known in offshore oil and gas installations to have occupational exposures and health risks." Dr. Cullen, in his December 29, 2005 letter, commented:

> On the following page (following the list of six chemical substances) appears the following comment: "while these substances were low, 2-ethylhexanol were extremely high in all three rooms..." Without commenting on the relevance of these materials to the health of the house occupants, I find myself again perplexed by the evident lack of thoughtfulness and precision in the description of results. What, may I ask, is the basis for the interpretation that 76 or 91 or 57 nanograms per gram of carpet represents a "high" value? Although surely the number is higher than, say the detection limit or the values of the other organic materials obtained, a relationship to human health cannot be inferred without knowledge of the route of exposure and likely dose. All that can be meaningfully said is that there is more to ethylhexanol on the carpet sample than there is, for example, toluene. Any inference regarding human exposure or health from this carpet analysis is unsupportable.

[88] Dr. Cullen continued with further criticisms of Professor Lee's letter:

> A similar criticism pertains to the discussion of the Fenwick laboratories limited carpet and paint chip analysis on the following page. While (unquantified) trace substances of various organic materials were identified by Fenwick, the assertion at the top of the sixth page of the letter that "Fenwick Laboratories Ltd. declared that the presence of the substances may lead to the deleterious health effect experienced by the occupants" is an unconscionable repetition of a flawed inference made by the laboratory. In the Fenwick report itself there is absolutely no quantification which would allow estimation of the amount of material actually present in the carpet and paint chip, there is no information regarding the source of the materials identified in the paint chip and carpet and most importantly, no information whatsoever about potential routes of exposure of the individuals living in the house that might pertain to their health. For an environmental expert to corroborate this sort of disinformation speaks either to a failure to understand the basic fundamentals of toxicology in relationship to exposure dose or the lack of understanding of what the laboratory analysis actually purports to show. Finally regarding this letter, there is a section on health effect in which Mr. Lee points out what he believes is apparently corroboration between the Fenwick carpet and paint analysis and the Accu-chem blood and fat analysis to which I will come shortly. In point of fact there is almost no correlation whatsoever between the small number of volatile organic materials (among literally thousands the method could detect in theory) measured in Fenwick and the small number with measurable levels in blood of the patients in this case. It is particularly ironic that Mr. Lee mentions it in view of the fact that the source of the chloroform measured in adipose tissue in three of the four patients not only could not be identified in their blood but also has appeared in no environmental specimens including this one!

[89] In respect to his criticisms of the visual examination by Mr. Robicheau, and his failure to notice stains or spots that Prof. Lee observed on the video of May 11, 1994, in his discovery of May 18, 2007, Professor Lee agreed that a person in the house and viewing a spot or stain would be in a better position to comment on what it was.

[90] In his discovery of February 9, 2007 Professor Lee had an exchange with defence counsel respecting the scope of his expertise. He mentioned that his expertise was broader than the design of buildings to minimize indoor contaminants. As to the other areas, he said:

> A. Looking at energy conservation; recycling of heat, extracting heat from exhaust air, extracting heat from sewers to heat buildings; the building envelope, which is to maintain the integrity of the building envelope so it does not leak water, doesn't have condensation that can manifest into mould growth; the area of using renewable energies, like solar, to heat water and air; a variety of different things related to the built environment.
>
> Q. Right. But I guess, again, my impression of what you've just described is that the main focus or your area of expertise is more with regard to the design and construction of better buildings as opposed to the effects on health of contaminants that are in the air.
>
> A. That's partial. You cannot divorce occupants from the design of buildings. What good is a beautiful-designed building if people inside are sick? So, therefore, my focus has been to provide a quality, durable environment in which it would maintain the health of the individuals inside. You cannot divorce those two. For example, if a building leaks, it's certainly going to compromise integrity and value of the building, but it's also going to manifest into mould growth and other types of problems, including structural problems, and that's going to certainly compromise the health and safety of the individuals inside. So it's all interlinked.

[91] Clearly Professor Lee's expertise is limited to designing buildings and structures that provide a "quality, durable environment in which it would maintain the health of the individuals inside." His reports, and particularly his criticisms of the investigation and report by NSRFC to the extent presented in the course of this trial, extend well beyond the scope of his expertise both by training and experience. Perhaps it is no better stated than when he, in his September 2, 2004 letter to counsel for the plaintiffs, wrote:

> Furthermore, I believe the case hinges on the medical evidence of chemical exposure and its impact on their health. A physician would be more qualified than I to formulate such an opinion.
>
> I do not want to mislead you in thinking that I can provide substantive arguments to help your case. As it stands, the best I can do is conjecture based on second hand reports. As such, I wish to be relieved from consulting you on this case. I will send back all of the documents to you shortly.

[92] The four letters provided by Professor Lee can be described in one word, "troubling". Where there is contradiction or contrary conclusions in respect to when and how to conduct an indoor air quality examination, I prefer the evidence of Mr. Robicheau to that of Professor Lee. Where there is contradiction or contrary conclusions in respect to the interpretation of health effects from the reports of Accu-Chem Laboratories or Fenwick labs, I prefer the evidence of Dr. Jean Gray, as well as Dr. Cullen.

Larry Hay

[93] Mr. Hay testified that part of his duty as an insurance adjuster was to find out what had happened, whether it was covered by the policy, and what coverage, if any, applied. He had an obligation to the insured and to the insurer,Wellington, to adjust the claim. This obligation would extend to the occupants of the home as well. He was required to contact the insured, find out what had happened, quantify the damage and loss and settle the claim. In 1990 – 1991 Gail Munroe was his supervisor. He could not recall if Donna Strong had been a supervisor for a short period, prior to Ms. Monroe, or was a resource person. She was not his supervisor in the fall of 1991, but became his supervisor later.

[94] Mr. Hay testified that until the defendants retained counsel, he had not considered that Ms. Tingley was involved in a fraud or that she was not telling the truth. At no time did he think she was faking things or making things up, he said. Later, he said that up to November 1, 1993, the only reason he would not have believed Ms. Tingley, was her failure to substantiate some of her allegations.

[95] Mr. Hay said he believed he first spoke to Ms. Tingley while she was in Sydney, when they arranged to meet on her return to Halifax. His Day Timer indicated that his first meeting with her was on September 30, 1991. He denied that she told him during their first phone call about receiving a call from someone who said that Ms. Tingley had ruined their life. He said he first heard about a death threat from Mr. Proudfoot, the defendants' counsel at the time, or at a meeting at the RCMP office, some time later. He said that if she had told him about a death threat, either while she was in Sydney or at any other time, he would remember.

[96] Mr. Hay said his office received a phone call from Ms. Tingley before he met with her. The note of the call said, "chemical sprayed on her & her daughter's clothing - gone through to the wood RCMP on the way over!" He called Ms. Tingley, who told him that items had been taken, including clothes, that there were spots on clothes that remained and that clothes in drawers were soaked. She wanted the RCMP to investigate what was sprayed on her clothes. She thought it was a pesticide or bleach. She said she had put something on the previous night and broke out in a rash. Ms. Tingley also said a dresser was damaged, that the intruders had been in her daughter's room and that there was blood on the carpet. She said she did not have any suspects. Mr. Hay denied that these notes were from his visit to the house, saying they were from the phone call that preceded the visit.

He said she did not say why she thought a pesticide or bleach had been sprayed, nor did he ask her.

[97] Mr. Hay said he went to the house around 3:15 p.m. on September 30, 1991. He said the children were present, as well as an RCMP officer, whose name he did not recall.

[98] Mr. Hay said that Ms. Tingley may have shown him the top that she said she had put on, but he did not ask to see the rash, and did not question it. He accepted it. She said the top came from a drawer, but she did not say she had washed it before trying it on. He said he did not detect any smell on the clothing. He said he did not stick his nose in the drawer, but that he was close to the clothing.

[99] After the RCMP officer left, Mr. Hay said, Ms. Tingley showed him around the house, including the dresser that had been soaked. The clothes in the bottom of the dresser appeared wet, or as if they had been wet, but he did not touch them. Ms. Tingley did not point out any spots or discolouration on the walls or carpets. Mr. Hay said he saw graphite and mud on the carpet. He said Ms. Tingley told him about items that had been taken, including electronics. She did not show him any of Kelli's clothing that was wet. He denied that Ms. Tingley expressed concern that day that the substance might be in other parts of the house, but was not then observable because it had dried up. He said on discovery that Ms. Tingley was concerned whether what was on the clothes might be elsewhere in the house and had dried up. At trial Mr. Hay said he did not recall this. Upon further reference to his discovery, Mr. Hay said that this statement related to events after the IWK visit.

[100] A note in Mr. Hay's file dated October 1, 1991, indicated that he spoke to Kim Tingley, who told him the RCMP had taken the back of the dresser, and that apparently Ms. Tingley's son had stepped into the bath the previous night and his feet had started burning, so they went to the hospital, and the hospital had thought it was a pesticide.

[101] Mr. Hay denied the suggestion by Ms. Tingley that she had offered to provide him with the records from Poison Control. On discovery he had said that while the family was at Cambridge Suites, Ms. Tingley had told him she had records of Todd's visit, but it was only the outpatient report, and was limited to his burning feet, or whatever the problem was at the time. Mr. Hay did not dispute

that at his discovery he said he believed that while at the Cambridge Suites Ms. Tingley was talking about health problems and that he had said, “I can only deal with the house. If the activity at the IWK helps us identify what it was, that’s great. But the policy does not extend to cover you or your family’s health.”

[102] Mr. Hay said that at some point, he was informed that a friend of Kelli Smith had become sick. Although he received the phone number of Paula Robbins’ parents, he never followed up about the complaint. He relayed what Ms. Tingley told him to Nova Scotia Research Foundation.

[103] Mr. Hay testified that his notes dated Nov. 5 1991 could have been made after a meeting at Ms. Tingley's house, although he had previously stated that he did not believe he was at the house that day. He denied that Ms. Strong was present on this occasion. He also denied any discussion about damage to Kelli's jeans. After being referred to a passage in his discovery that suggested that Ms. Strong may have been present at the house on November 5, Mr. Hay said this was before he had an opportunity to review the cheque that was issued on November 21, when Ms. Strong was present. He said Ms. Strong was only present once when he was there. He said both of them signed the cheque and that the cheque was issued while they were at the house.

[104] On discovery in October 1996, Mr. Hay referred to a notation in his day timer of "8:45" and "Pat Smith," and said this was possibly the time of the visit by himself and Ms. Strong. At this meeting, they discussed the alleged damage to clothing, and Ms. Strong and Ms. Tingley looked through clothing in a pile on the floor in order to identify damaged items. A cheque for $3500 was issued. Mr. Hay said on discovery that there was no conversation with Ms. Burton, but she made comments when Ms. Tingley left the room. He recalled her criticizing the way Ms. Tingley was being dealt with. On direct examination he appeared to say he did not recall Ms. Burton saying anything.

[105] Mr. Hay went to the house with Donna Strong on November 21, 1991, after the cleanup by James Proper Care. He was shown what was alleged by Ms. Tingley to be semen on the window screen in Kelli’s room. There was also a “discolouration” on the wall in the bedroom, that could be seen in a certain light. He thought they agreed to seal it over and paint it. His recollection was that it was the size of a two dollar coin. Other than these things, and the graphite and mud on

the carpet, Mr. Hay said he did not see any stains on the walls at any time. He saw evidence of stains on clothing that had apparently been dry cleaned.

[106] Mr. Hay said he visited the house again with Scott McKnight, of OCL, who was retained by the defendants to prepare a report. Mr. McKnight reported that he saw spots and stains that appeared to have been caused by some form of oily spray, as, for example, from a can of WD – 40. Mr. Hay said he did not see the spots or stains that Mr. McKnight was referring to. Mr. McKnight did not testify.

[107] The defendant Wellington obtained an appraisal report, dated May 4, 1995, in which the appraiser stated: "[b]esides the fact samples were taken from carpets other carpets such as living room were partially stained." Mr. Hay said he would have read the report, but did not recall it. He said he did not know what the appraiser was referring to. Counsel also showed him a number of photographs in the report which were suggested to have indicated stains or discolouration. With respect to photographs where Mr. Hay acknowledged the appearance of stains, he said his attention was not drawn to the stains when he was in the house. Mr. Hay noted that the appraisal report is dated May 4, 1995, which was after he was in the house with Mr. McKnight in November/December, 1993. He said he could not say if the stain was visible in the house at that time.

[108] Mr. Hay recalled seeing stains or discolouration in the video. He said that when he was in the house between September and November 1991, none of the stains were pointed out to him nor did he see them. He did not accept that the stains were present after the break-in and before the cleanup.

[109] Mr. Hay said he contacted the Nova Scotia Research Foundation shortly after his meeting with Ms. Tingley on September 30, 1991. He said he spoke to Bill Thorpe about testing to identify the substance. He said he told Mr. Thorpe that the substance was suspected to be a pesticide. He said Mr. Thorpe did not say the lab was not equipped to test for pesticides. Mr. Thorpe told him to provide a sample of a saturated piece to Mr. Robicheau. Mr. Hay said that when he took the clothing to Mr. Robicheau, he told Mr. Robicheau that Ms. Tingley thought the substance was a fungicide or pesticide, possibly manganese-based. He said he did not ask him to test for anything specific, such as urine. He disagreed with the evidence of Mr. Robicheau on this point, but agreed that in conversation with Mr. Robicheau the possibility of urine could have come up. He asked him to test the clothing on the basis that what was on the clothing was what was in the house,

relying on the information he received from Ms. Tingley. He said he gave no restrictions or limitations.

[110] Mr. Hay had stated on discovery that Ms. Tingley had said the substance might be urine, but said at trial that he did not have a specific recollection of her saying this. Mr. Hay also acknowledged his statement on discovery that he asked Mr. Robicheau to check for manganese or something similar. He said he would have delivered the clothes with that indication. He said he had no reason to question Ms. Tingley's suggestion of manganese or a like substance.

[111] Mr. Hay did not recall asking Ms. Tingley where she obtained the clothing samples that she gave him to take to the Nova Scotia Research Foundation. He recalled her pointing out one stain. She said that if the substance could be identified, this would establish what the substance was in the house. Mr. Hay said he delivered several items of clothing to Mr. Robicheau, and did not get them back.

[112] Mr. Hay disagreed with Mr. Robicheau's evidence that he did not receive the clothing samples from Mr. Hay until October 17, 1991. He said he delivered them the day Ms. Tingley brought them to his office. He said he received the information about the results of the testing on October 28, and Mr. Robicheau told him there was no manganese. When he called Ms. Tingley on that day, he told her the cleanup was underway.

[113] Mr. Hay said he and Ms. Tingley discussed the preferred contractors and suppliers. For the cleanup, he said, the preferred contractor was James Proper Care. Ms. Tingley, however, wanted to use East Coast Restoration, who had been recommended to her. He said he explained to her that it was her option, but if she used someone other than the preferred contractor, she would be responsible for any costs in addition to what the preferred contractor would have charged Wellington.

Donna Strong

[114] Donna Strong became Mr. Hay's supervisor in July 1993. She was his supervisor when she attended at the residence, at the time that Mr. Rizzuto (one of Ms. Tingley's former counsel) also attended, but not when she went to the house with Mr. Hay in 1991. She was first aware of the claim when she received a call from Ms. Tingley, on November 4, 1991. She had known Ms. Tingley from having lived in the same neighbourhood, and they had met when Ms. Tingley was

seeking rehabilitation business from Wellington. Ms. Strong's notes document that Ms. Tingley was upset, and referred to how the cleaning of the house had been carried out. She said Mr. Hay later asked her to go to the house. She said she was there twice, but only once with Mr. Hay.

[115] Ms. Strong stated that on one of her visits to the home there was another lady in attendance, who she now knows to be Margaret Burton. This was the meeting attended by Mr. Hay. She said Kelli Smith may also have been present at this meeting. She thought that this was the meeting in November to discuss clothing.

[116] Ms. Strong said she did not remember Kelli Smith expressing a concern about her clothes, nor did she recall any discussion with Ms. Burton. She did recall Ms. Tingley showing her various pieces of clothing, some with stains and some without. She said the stains were like bacon grease. She said she did not take any of the stained clothes for the purpose of testing and she did not have a view as to what had caused the staining.

[117] Ms. Strong agreed that it would be inappropriate for an adjuster to tell an insured that notwithstanding the stains, the clothes could still be worn. She said she did not recall Mr. Hay saying this about Kelli Smith's jeans, nor did she recall Ms. Smith being in tears on account of such a comment. She did not recall Ms. Smith speaking at all, and said she did not speak to Ms. Burton. She denied that Ms. Burton asked her if it was safe to be in the house. She said she had not heard the word "alum" before testifying in court. Plaintiffs' counsel had suggested that Ms. Burton had described a taste in her mouth as being like alum.

[118] Ms. Strong said Ms. Tingley agreed to a cash payment on account of the clothing. She said Mr. Hay would have made the decision, as it was his file. She had agreed with the decision.

[119] Brian James accompanied Ms. Strong to the house on her second visit, in order to assess any stains that had not been removed by the cleaning. She said they did not see any stains, although there were two or three droplets of what looked like water on the ceiling. Apart from her note, Ms. Strong had little or no independent recollection of this visit. She remembered looking in an upstairs closet, where the carpet around the baseboard was discoloured. There was no reference to this in her notes. The stain extended an eighth to a quarter of an inch

from the wall. She said it looked like soot, dark in appearance. Apart from some fading, these were the only stains she saw on the carpet. Mr. James had no explanation for it. She said in respect to some colour differences in the carpet that some appeared to have faded. She said if this had been caused by a chemical, she would have expected it to be "blotchy". Ms. Tingley pointed out a stain in the dining room area, claiming it was from chemicals. When Mr. James said it appeared to be from cooking steam, Ms Strong said she agreed. She agreed that they did not discuss with Ms. Tingley their theory that these stains had been caused by cooking.

[120] Ms. Strong said Ms. Tingley told her she had three tumours, two in her chest and one in her kidney, which she said the environmental doctors she had been seeing believed could be related to the chemical allegedly sprayed in her house. Ms. Strong said she did not discuss these tumours with Ms. Tingley, and she did not recall discussing with Ms. Tingley that she had had fibro cystic tumours herself. She said she did have them, but did not remember at what time. She did not recall Ms. Tingley mentioning blood in her urine.

[121] At the meeting Ms. Strong told Ms. Tingley that she was responsible for proving her claim that a chemical had been spread in the house, and that the chemical was causing bodily harm, and that Wellington would consider such evidence. She was making no real commitment, but if Ms. Tingley could provide proof, they were prepared to review it and then determine whether it was covered by the policy.

[122] Ms. Strong said she did not suspect that Ms. Tingley was lying, and said no one had suggested this to her. She said Ms. Tingley did not strike her as unbalanced or unreasonable, and that Mr. Hay did not tell her that he thought she was unstable, unbalanced or mentally unsound. She said Mr. Hay never mentioned seeing a powdery substance in the house, nor did she see evidence of anything toxic in the house.

[123] She said she did not recall any discussion about painting Kelli Smith's room, or the ceilings outside her room. She saw a substance on Ms. Smith's window, probably when she was at the house to look at the clothes. She drew no conclusion as to what it was. When Ms. Tingley had called to complain about the handling of the file, she did complain about semen being on her daughter's window, so Ms. Strong had assumed it would have been after the break and enter**.** She said it

looked cloudy and covered about a foot. There was no pattern. She did not conclude what had caused it, nor why James Proper Care had not cleaned it. She said by cloudy she means it was “milky in colouring”.

[124] In reference to the phrase “we can do it the hard way or the easy way” Ms. Strong said there are hard ways and easy ways to handle claims. As an example she said in respect of contents, the insured can accept cash or can proceed to list all the items, and where they were purchased. She said there was no penalty involved in not using a preferred vendor, but the insured would be told that they would have to pay any difference between the price of their supplier or vendor and the price that would have been charged by the preferred vendor. She said the insured has control over who does the repairs.

Brian James

[125] Brian James was the owner of James Proper Care in 1991. In the fall of 1991 James Proper Care had more than 20 employees, including professional cleaners, carpenters and painters. Mr. James was the estimator and supervisor. He recalled the 150 Silestria Drive claim, although he said the company’s file had been lost. After Larry Hay contacted him, they did a site visit together. It took several weeks to get approval to do the work, while Mr. Hay determined whether there was a substance in the house, although Mr. James was not aware of the details.

[126] When Mr. James was given the go ahead, the cleaning was done over three days. They cleaned the interior of the house, although they did not wash the ceilings. He said he met Ms. Tingley several times during the cleaning, and she did not indicate that she did not want his company to do the work. The scope of the work increased; they were eventually required to clean the laundry (due to a possibility of contamination) and steam-clean the carpets. They did a complete kitchen cleaning, which was unusual for a break-and-enter.

[127] Mr. James said he saw black, oily residue stains on the walls, caused by graphite used by the RCMP for finding fingerprints. The stains were around the top of the stairs, near the trim and in the main hallway, and were the size of a finger or the palm of the hand. It is difficult to clean graphite, which he and Ms. Tingley discussed. The graphite stains were the only stains he saw in the house. He said he saw no stains on the ceilings.

[128] Mr. James said they encountered nothing unusual in cleaning the house. There was nothing that could not be cleaned with soap and water. They cleaned the walls, and the carpets were steam cleaned at the request of Mr. Hay. They would have only been cleaned in the traffic area where the break and enter occurred, but Mr. Hay asked them to clean the carpets throughout. This was not typical for a break and enter. Mr. James said he only saw graphite on the carpets, below where the fingerprinting was done on the walls.

[129] Mr. James said the cleaning was done with a steam cleaning machine. It was not satisfactory to Ms. Tingley. There was still some staining from graphite and he had an outside firm, Ideal Cleaners, clean it with a stronger unit, for which he did not charge Welllington. The second cleaning was a matter of customer satisfaction.

[130] In respect to the suggestion of fading of the carpet, Mr. James said there was fading by the patio door, at the back of the house. There was also a discussion about discolouration, which was not changed in the second cleaning.

[131] Mr. James's company painted an upstairs bedroom, at the request of Ms. Tingley, without Wellington's involvement. He said Ms. Tingley did not pay for the painting, saying the colours were wrong, although she had chosen them. He denied that a sealer was applied as Ms. Tingley said. When Ms. Tingley refused to pay for the painting, Mr. James eventually commenced a Small Claims Court proceeding. In the course of discussions with Mr. Hay, he learned about Ms. Tingley's dispute with Wellington, and decided to write off the claim as a result.

[132] At Mr. Hay's request, Mr. James subsequently provided a letter to him setting out the history of his dealings with Ms. Tingley over the painting. The references in the letter about tests in Texas and Massachusetts and about "going to war" with the Insurance Company were based on things Ms. Tingley said during a meeting at the Small Claims Court office. Ms. Tingley denied that she was in Small Claims Court when Mr. James was present. She also denied telling him that she was "taking no prisoners."

[133] After the cleaning, there was a meeting at Ms. Tingley's house with Ms. Strong and Ms. Tingley, along with her lawyer. Mr. James recalled that the carpet was not much different than when he had left. He was satisfied that it had been

completely cleaned. It was now two years older and some wear and tear would be expected. He also believed there was some sunlight fading. He did not see any staining, and the graphite had been cleaned up after the second cleaning.

[134] Mr. James said he had noticed staining on the ceiling of the kitchen that he felt was from cooking, specifically from frying or boiling. He did not observe any other stains in the house, and denied that his workers washed stains off the walls and ceilings, saying there were no stains to wash off. He said the staining that was visible in the May 1994 video was not present when he was in the house in 1991.

[135] Mr. James said neither he nor his employees reported any adverse reactions from being in the house. He said that when he went in to clean there were accusations or comments about something being sprayed on the clothing or furniture, but it was not a big concern. He knew by that time that Mr. Hay had sent clothing to be tested, although he did not know this when he did the original estimate.

[136] Mr. James agreed that on discovery he had said the ceiling had been painted, but in his evidence he said he did not paint the ceilings. After he read the estimate, he concluded that the ceiling was not painted. He said he did not recall being instructed to clean the ceilings, though there was evidence from Mr. Hay that he had. The estimate did not suggest the ceilings were cleaned.

Michael Robicheau

[137] Mr. Robicheau was qualified as an expert in the field of analytical chemistry, and in particular, methods of testing for the presence and identification of chemicals in materials and air, including, but not limited to, indoor air quality testing, classical testing and instrumental testing. Mr. Robicheau's qualifications in respect to air quality testing arose primarily from his on-the-job training.

[138] Mr. Robicheau said Larry Hay told him that something had been thrown or spread in the house and he wanted Mr. Robicheau to establish what it was. Mr. Robicheau said Mr. Hay suggested air quality testing, instructing him to do "whatever it takes." Mr. Robicheau said no limitations were placed on him. Even when (he believed) he told Mr. Hay it would be expensive, the response was that he did not care, he wanted it done. Mr. Hay did not direct his work, although he responded to Mr. Robicheau's questions. He said he wanted Mr. Robicheau to

check out the master bedroom and the dresser. From there, Mr. Robicheau said, he went through the house.

[139] Mr. Robicheau said his normal practice would have been to look throughout the house, checking for odours or leaks. After this first visit he would normally discuss the next step. He would talk about the cost and explain what could be done. The next visit would be the walk-through. It would be more involved and would usually include taking notes, pictures and air samples. Subsequent steps could include another visit and further testing. The decision to move from one step to another would depend on what was found on the previous step.

[140] In describing his inspection of the house, Mr. Robicheau said he was given free reign on where to go, although Mr. Hay directed him to go to the master bedroom in particular. He said he usually goes to all parts of a house, but he could not recall looking at any particular part other than the master bedroom. He was looking for signs that someone had put something in the house or sprayed the walls with a chemical. He did not smell or taste anything, nor did he locate any stains on the walls, ceilings or carpets. He did not see anything suspicious that called for further testing.

[141] Mr. Robicheau testified that he told Mr. Hay that an air quality test would not be helpful. Mr. Hay nevertheless asked if it could be done anyway. Mr. Robicheau said he did not see anything in the house that was worth following up on. He agreed, in hindsight, that it might have been preferable if he had talked to the residents.

[142] After the site visit Mr. Robicheau received clothing samples from Mr. Hay. The samples were tested between October 17, 1991, when he said, he received the samples from Mr. Hay, and November 4, 1991, the date of his report. He focused on one blouse which had a visible stain, two to three inches in diameter. He did not remember any strong colour. He did two different tests, which indicated that urine was a good possibility for the stain. Although he agreed that there was not absolute proof, he believed that the substance was urine.

[143] Mr. Robicheau said that prior to testing he would have asked Mr. Hay what he thought the substance was, in order to narrow the focus of his testing. He said Mr. Hay asked what he should do in terms of cleanup. Mr. Robicheau determined that cleanup would involve soap and water.

[144] Mr. Robicheau said he normally would never say a house was safe, only whether anything was found that was “above or below the guidelines”. His report did not comment on indoor air quality. It was mainly an analysis of his testing of the blouse. Mr. Robicheau did not dispute that he had previously reported seeing a powder near a radiator, electric heater or the like, although he said he did not recall this at trial. The fact he did not take samples, he said, meant he did not feel it was either toxic or a problem. If he thought it was a pesticide, he would have taken a sample for testing, although his lab was not set up to test for the majority of pesticides. He said he believed he told Mr. Hay that he could not rule out that there was a pesticide in the house, but he also believed he would have told him that he did not think there was any such substances there. He also believed that he told Mr. Hay that he had not conducted any tests for pesticides, and that he had not seen anything that would be harmful so as to cause health effects. Mr. Robicheau said that in reviewing the video made in May 1994, he could see markings, but said these were not there when he was in the house in 1991.

LAW RELATING TO THE CAUSES OF ACTION

[145] The causes of action to be determined are negligent misrepresentation and equitable fraud. The plaintiffs also assert bad faith, not as a cause of action, but as a factor going to damages.

Negligent Misrepresentation

[146] The plaintiffs allege the defendants negligently misrepresented to them that the house was safe to live in. They say Mr. Hay misled them when they asked him whether the house was safe to return to, by representing that it had been "properly tested by a credible organization" (in the plaintiffs' words) and was safe, when in fact he had not determined whether it was safe. According to the plaintiffs, any suggestion by the defendants that the house was safe is without merit because, without proper testing at the time, it cannot be said that it was safe. They say they relied upon the alleged representation to their detriment.

[147] The defendants deny making any comment about the safety of the house. Alternatively, they argue that such a statement would be reasonable and not negligent. The defendants assert that the plaintiffs have not offered “a single test result confirming that a dangerous and unusual chemical had been sprayed in their

house. Nor were they able to call a single witness who was prepared to identify the alleged chemical or offer proof of how the alleged chemical got into their bodies". There is, the defendants maintain, "no scientific evidence that the house was made unsafe by a chemical in September, 1991".

The Alleged Misrepresentations

[148] Patricia Tingley testified that at the start of the clean-up, Mr. Hay told her everything was fine and she could move back into the house after the cleaning was completed. She also alleged that after the house had been cleaned by James Proper Care, when Mr. Hay and Donna Strong met with her and Margaret Burton, Mr. Hay was asked if the house was safe and he said "yes." She said Ms. Strong also confirmed that the house was safe in this conversation. Margaret Burton recalled a meeting at the house with Ms. Tingley, Mr. Hay and Ms. Strong, where they looked at articles of damaged clothing. She testified that she asked Mr. Hay if he tasted something and he told her it was just the cleaners. She claimed that Mr. Hay and Ms. Strong laughed at her and mocked her. She said she asked Mr. Hay if he guaranteed that the house was safe, and he said yes, after which she asked Ms. Strong the same question and allegedly got the same answer. Mr. Hay and Ms. Strong denied making either of these representations. The defendants point to various alleged inconsistencies in the evidence of Ms. Tingley and Ms. Burton, which they say compares unfavourably with the evidence of Mr. Hay and Ms. Strong.

The Law of Negligent Misrepresentation

[149] The law governing negligent misrepresentation is set out in *Queen v. Cognos Inc.*, [1993] 1 S.C.R. 87, [1993] S.C.J. No. 3, where Iacobucci J., writing for a majority on the issue, referred to *Hedley Byrne & Co. v. Heller & Partners Ltd.*, [1964] A.C. 465, and said, at paras. 30 and 33:

> ... Though a relatively recent feature of the common law, the tort of negligent misrepresentation relied on by the appellant and first recognized by the House of Lords in *Hedley Byrne*, *supra*, is now an established principle of Canadian tort law. This Court has confirmed on many occasions, sometimes tacitly, that an action in tort may lie, in appropriate circumstances, for damages caused by a misrepresentation made in a negligent manner....
>
> The required elements for a successful *Hedley Byrne* claim have been stated in many authorities, sometimes in varying forms. The decisions of this Court cited above suggest five general requirements: (1) there must be a duty of care based on a "special relationship" between the representor and the representee; (2) the representation in question must be untrue, inaccurate, or

> misleading; (3) the representor must have acted negligently in making said misrepresentation; (4) the representee must have relied, in a reasonable manner, on said negligent misrepresentation; and (5) the reliance must have been detrimental to the representee in the sense that damages resulted.

[150] There is authority for the proposition that a defendant's silence, or the failure to disclose information, may constitute negligent misrepresentation in appropriate circumstances, such as where a property vendor remains silent about a latent defect: see, for instance, *Desmond v. McKinlay* (2000), 188 N.S.R. (2d) 211, 2006 CarswellNS 178 (S.C.). The plaintiffs also submit that where reliance is placed on the advice of a professional, the speaker must qualify their advice if there are necessary qualifications: see, for instance, *Manitoba Sausage Manufacturing Co. Ltd. v. City of Winnipeg* (1976), 1C.C.L.T. 221, CarswellMan 24 (Man. C.A.).

Duty of care

[151] The duty of care in negligent misrepresentation was considered in *Hercules Managements Ltd. v. Ernst & Young*, [1997] 2 S.C.R. 165, [1997] S.C.J. No. 51. La Forest J., writing for the court, cited the test for existence of a duty of care that originated in *Anns v. Merton London Borough Council*, [1978] A.C. 728 (H.L.), and was restated by Wilson J. in *Kamloops (City of) v. Nielsen*, [1984] 2 S.C.R. 2. LaForest, J. wrote, at para. 20:

> In *Kamloops*, *supra*, at pp. 10-11, Wilson J. restated Lord Wilberforce's test in the following terms:
>
> > (1) is there a sufficiently close relationship between the parties (the [defendant] and the person who has suffered the damage) so that, in the reasonable contemplation of the [defendant], carelessness on its part might cause damage to that person? If so,
> >
> > (2) are there any considerations which ought to negative or limit (a) the scope of the duty and (b) the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise?

[152] La Forest, J. went on to confirm that the same analysis should be applied to cases of negligent misrepresentation (paras. 20-21).

[153] In *Hercules Management*, *supra*, Justice La Forest stated that “proximity can be seen to inhere between a defendant-representor and a plaintiff-representee when two criteria relating to reliance may be said to exist on the facts: (a) the defendant ought reasonably to foresee that the plaintiff will rely on his or her representation; and (b) reliance by the plaintiff would, in the particular circumstances of the case,

be reasonable" (para. 24). He went on to address the limiting considerations under the second branch of the *Anns*/*Kamloops* test, stating that questions of the defendant's knowledge of the identity of a plaintiff would be considered at that stage (para. 30). Considering the policy objections to the threat of "indeterminate liability," he said, at para. 37:

> ... If the purpose of the *Anns*/*Kamloops* test is to determine (a) whether or not a *prima facie* duty of care exists and then (b) whether or not that duty ought to be negated or limited, then factors such as these ought properly to be considered in the second branch of the test once the first branch concerning "proximity" has been found to be satisfied. To my mind, the presence of such factors in a given situation will mean that worries stemming from indeterminacy should not arise, since the scope of potential liability is sufficiently delimited. In other words, in cases where the defendant knows the identity of the plaintiff (or of a class of plaintiffs) and where the defendant's statements are used for the specific purpose or transaction for which they were made, policy considerations surrounding indeterminate liability will not be of any concern since the scope of liability can readily be circumscribed. Consequently, such considerations will not override a positive finding on the first branch of the *Anns/Kamloops* test and a duty of care may quite properly be found to exist.

[154] La Forest, J. went on to state that "the problem of indeterminate liability will frequently result in the duty being negated by ... policy considerations.... Where, however, indeterminate liability can be shown not to be a concern on the facts of a particular case, a duty of care will be found to exist" (para. 41).

[155] Ms. Strong's evidence was that Ms. Burton would be an unnamed insured, if she were an invited visitor to the house. The plaintiffs argue that a reasonable adjuster would know that a family sometimes invites friends, relatives and business associates into their home. If the house is contaminated, they submit, it was reasonably foreseeable that such individuals would be put at risk of harm if the defendants negligently misrepresented that the house was safe.

[156] The defendants admit that they owed a duty of care to Patricia Tingley, Kelli Smith and Todd Smith. They deny that any such duty existed with respect to Margaret Burton, who, they say, was neither an insured, nor a resident of the house in November 1991. They submit that there was no evidence that Larry Hay knew any more than that Ms. Burton was a friend of Ms. Tingley's who attended one meeting at the house, on November 21, 1991. They say there was no evidence that Mr. Hay was told that Ms. Burton planned to live in the house or spend substantial time there as a guest. Ms. Burton testified that she did not stay overnight on November 21, 1991. Rather, Ms. Tingley paid for her to stay in a hotel. According to the defendants, the information available to Mr. Hay, as of November 21, 1991, did not indicate that Ms. Burton, who lived in Sydney, would be in the

house for prolonged periods of time. Nor could he have been aware of any particular susceptibility on her part. Therefore, any guarantee of safety would have been given in relation to the Tingley/Smith Family - the residents - and not Ms. Burton. Therefore, the defendants say, it cannot be said that Mr. Hay could have reasonably contemplated that carelessness might cause damage to Ms. Burton.

[157] On November 21, 1991, Ms. Burton was an invited guest of Ms. Tingley. This was clearly known to Mr. Hay and Ms. Strong. Ms. Burton testified that in November 1991, Mr. Hay told her that the house was safe. She also said Ms. Strong made a similar representation. This occurred during the meeting on November 21; Ms. Burton believed that November 20 or 21 was the first time she was in the house since September. As an invited guest it would be reasonable for the defendants to foresee that she would rely on such a representation and such reliance would, in the circumstances, be reasonable. Indeterminate liability would not be a concern, since the scope of liability would be limited to invited guests, such as Ms. Burton. The scope of liability would be further limited in that Ms. Burton was a person known to the defendants at the time of the suggested representation. On November 21, 1991, the defendants owed a duty of care to Ms. Burton. As with the other plaintiffs, the issue remains whether the representations were made, and if they were made, whether the other elements of the torts of negligent misrepresentation or equitable fraud are present.

Inaccurate Statement

[158] The defendants maintain that there is no credible evidence that a chemical or toxin was spread in the home during the break and enter. The only scientific evidence submitted by the plaintiffs were the blood and adipose tissue lab reports from AccuChem Labs and sample testing results by Craig MacMullin of Fenwick Labs. Dr. Jean Gray did not consider the AccuChem lab reports as evidence of a toxic exposure, and considered the chemicals to be ones that are common in homes. She said the xylenes and trimethylbenzene would have been carriers rather than toxins themselves. Craig MacMullin was not aware, when Ms. Tingley gave him carpet and paint samples, that the carpets had been cleaned, and he agreed that the solvents used by the cleaners would adhere to the carpet. He denied making statements attributed to him about the safety of the home or the plaintiffs' health. Dr. Gray did not regard the chemicals found in the Fenwick test as unusual ones in such an environment. The defendants maintain that the chemicals found in the samples have not been linked to the plaintiffs' health problems.

[159] Dr. Gray did not believe Ms. Tingley's reported symptoms were characteristic of insecticide exposure. She believed that Ms. Burton's problems were neurological. Any comments she made about toxic exposure were based entirely on what Ms. Tingley told her. She told Ms. Tingley in 1993 that neither the AccuChem nor Fenwick reports were of any use. Dr. Roy Fox also took the view that neither the AccuChem nor the Fenwick findings were of any significance. He believed the plaintiffs suffered from environmental illness based on what they told him about their health and from what he observed. Both Drs. Gray and Fox testified as part of the plaintiffs' case.

[160] Professor Tang Lee is a professor of architecture. He was not qualified as an expert on chemicals or their effects on human health. In his report of September 7, 2004, Professor Lee discussed a video of the interior of 150 Sitestria Drive made on May 11, 1994, which he said showed "evidence of chemical staining throughout the entire house including the walls, ceilings, bulkheads, carpeting, around light fixtures, at the junction between the walls and ceilings, etc." He did not identify specific chemicals, and did not comment on whether the stains posed a health risk. Other witnesses - Mr. Hay, Mr. Robicheau, Mr. James and Ms. Strong - denied seeing these stains when they were in the house. In correspondence with the plaintiffs' counsel, Professor Lee had stated that the stains could be from other causes. He described any opinion he could give as "conjecture based on second hand reports."

[161] The defendants also point to evidence of various witnesses who were in the house shortly after the break-in who said they noticed nothing unusual. The defendants say these witnesses include Kim Tingley, Cst. Howard Gillis, Sgt. J. Marando, Cst. Ken Turner, Cst. Angus Emberley, Larry Hay, Donna Strong, Brian James, Michael Robicheau and Paula Robbins. They also rely on the evidence of Dr. Mark Cullen, who testified as an expert witness on behalf of the defendants, to the effect that there is no known toxin that would produce the effects described by the plaintiffs.

[162] On the other hand, Kim Tingley also reported that he saw some staining, as did Ms. Robbins. Constables Turner and Emberley observed a stain or powder on one piece of clothing. Mr. Hay agreed that he saw wetness on a dresser and some clothing. Ms. Strong saw ceiling stains, as did Mr. James, which they apparently both believed were water stains from cooking. Ms. Strong also saw stains in

Kelli's bedroom. Mr. Robicheau did not dispute that he had previously indicated that during a visit to the house he found some powder or dust, although he did not actually recall this. There was, however, no evidence as to what substance caused the staining or what the dust or powder was. There was some speculation, but no evidence that it was in the nature of chemical toxin.

[163] As to the corroborating circumstances that the plaintiffs claim as support for a finding that a toxin was dispersed in their house, the defendants allege, firstly, that there was no death threat to Ms. Tingley; secondly, that Cst. Rice was never warned by the RCMP lab that everything in the house that could absorb chemicals must be destroyed; and, thirdly, that the events at the IWK Emergency Room on September 30, 1991, were not as described by Ms. Tingley and her children.

Statement Negligently Made

[164] Iacobucci J. described the standard of care in respect of negligent statements in the following terms, in *Queen v. Cognos*, *supra*, at para. 55:

> The applicable standard of care should be the one used in every negligence case, namely the universally accepted, albeit hypothetical, "reasonable person". The standard of care required by a person making representations is an objective one. It is a duty to exercise such reasonable care as the circumstances require to ensure that representations made are accurate and not misleading.... Professor Klar [in L.N. Klar, *Tort Law* (Toronto: Thomson Professional Publishing Canada, 1991)] provides some useful insight on this issue (at p. 160):
>
> > An advisor does not guarantee the accuracy of the statement made, but is only required to exercise reasonable care with respect to it. As with the issue of standard of care in negligence in general, this is a question of fact which must be determined according to the circumstances of the case. Taking into account the nature of the occasion, the purpose for which the statement was made, the foreseeable use of the statement, the probable damage which will result from an inaccurate statement, the status of the advisor and the level of competence generally observed by others similarly placed, the trier of fact will determine whether the advisor was negligent.

[165] The Nova Scotia Court of Appeal considered this aspect of negligent misrepresentation in *D. Roper Services Ltd. v. Cape Breton Development Corp.*, 2005 NSCA 7, [2005] N.S.J. No. 15. Cromwell J.A. (as he then was), writing for the court, cited *Queen v. Cognos*, *supra*, and said, at paras. 63 - 66:

> The trial judge found that Roper's claim failed primarily on the third element of the test: Roper failed to prove that Devco had been negligent in making the estimates.

> Roper challenges this conclusion on two bases. First, it is submitted that the burden of proof was on Devco to show that the information was compiled with reasonable care. Second, it is submitted that the trial judge erred in failing to draw the inference of negligence from the evidence presented. I do not accept either of these submissions.
>
> With respect to the first, the burden of proof of negligence was on Roper: *Hedley Byrne & Co. v. Heller & Partners Ltd.*, [1964] A.C. 465 per Lord Morris at 493; G.H.C. Fridman, *The Law of Torts in Canada* (2nd ed., 2002) at 403.
>
> As for the second point, the trial judge accepted the evidence of Devco's witness, Mr. MacVicar. He testified that he used the latest figures received from the production and marketing divisions in preparing the estimated tonnages. The trial judge also pointed out that the mere fact that a statement of future expectations turns out to be inaccurate, as these projections did, does not mean the statement was made negligently….

[166] The Court of Appeal held that the trial judge had not erred in dismissing the claim.

[167] It has been said that a defendant acts negligently in making a statement when the defendant "knew, or ought to have known" that the statement would give an impression that was "untrue, inaccurate and misleading": *Lang v. Knickle*, 2006 NSSC 177, [2006] N.S.J. No. 375 (S.C.) at paras. 34-41. Put differently, a statement will be negligently made when it conflicts with the balance of information reasonably available to the defendant, as where the defendant ignores evidence that is contrary to the representation and there is a lack of evidence supporting the representation. For instance, in *Ismail v. Treats Inc.*, 2004 NSSC 16, [2004] N.S.J. No. 21, a franchisor and its parent company misrepresented potential sales figures to the plaintiff franchisees, implying that the figures were based on operational experience, which they were not. In finding that the representations were negligently made, LeBlanc J. said, the *pro forma* statements that had been provided to the plaintiffs contained "an implied assertion that the results were typical and based on operating experience. To the extent that the figures were at one time accurate, or were honestly believed to be so, both defendants were negligent in not correcting them…" (para. 72).

[168] The defendants' primary position is that the alleged representations were not made. However, they argue in the alternative, had such representations been made, they would not have been made negligently. The defendants submit that when assessing whether reasonable care was taken, the observations made by Larry Hay and others, and the steps Mr. Hay took to investigate the plaintiffs' concerns, must be weighed against the absence of contemporaneous evidence of a problem with the house. Mr. Hay is an insurance adjuster, not a scientist, such as Mr.

Robicheau, or a professional investigator, such as the RCMP officers - each of whom investigated and found nothing. As a lay person, it is submitted, Mr. Hay's alleged negligence must be measured against the standard expected of a reasonable lay person, not that of a scientific or criminal investigation specialist.

[169] The defendants suggest that various facts known to Mr. Hay in 1991 gave him a reasonable basis to conclude that the house was safe. Neither the RCMP investigation, the IWK examinations of the plaintiffs or Poison Control indicated that a toxin was in the house. By November 21, 1991, Ms. Tingley had not provided any reports from an investigator or authority indicating that the house had been rendered unsafe by chemicals. Mr. Hay was in the house several times without observing evidence of toxic chemicals or feeling any ill-effects. Mike Robicheau of the Nova Scotia Research Foundation inspected the house and reported no evidence of a toxic chemical. The clothing samples tested by NSRF suggested the substance was likely urine. James Proper Care cleaned the house under instructions from NSRF. The defendants note that Mr. Hay and Ms. Strong were at the house on November 21, 1991, other than one stain on Ms. Smith's wall, Ms. Tingley did not point out any stains or smells, did not complain about the state of the carpets, and did not mention any health problems. Neither Mr. Hay nor Ms. Strong smelled anything unusual, or saw the stains shown on the May 1994 video.

[170] The September 7, 2004, report of Professor Tang Lee criticizes Mr. Robicheau's site inspection, his clothing sample testing and his conclusions. Professor Lee's report of July 3, 2005, suggests that an indoor air quality examination was required when the dispersal of unknown chemicals was reported. The procedure he described would involve various scientists, doctors and building experts. According to the defendants, Professor Lee's reports assume that an obvious source of contamination was visible; he recommends, for instance, that contaminated materials, including furniture and clothing, should be sent for laboratory analysis (see his July 3, 2005, report). Mr. Robicheau, in responding to criticisms by Professor Lee, said testing of samples may be conducted if a walk-through inspection provides any leads. Without a substance to sample, Mr. Robicheau stated, random tests would not be effective. Professor Lee's criticism was not supported by any evidence of a standard practice in 1991, and was contradicted by Dr. Cullen's evidence respecting air quality testing. The defendants say it was reasonable for Mr. Hay to rely on Mr. Robicheau’s advice as a professional in the field.

[171] The defendants say that after Mr. Robicheau's inspection, Mr. Hay advised Ms. Tingley that Mr. Robicheau did not think an air quality test would be fruitful, and that he would reassess the need for an air quality test after the clothing had been tested. Mr. Hay said Ms. Tingley knew that Nova Scotia Research Foundation did not do air quality testing, and that she knew air quality testing was dependent on the results of the clothing tests. Ms. Tingley denied that she was told there had not been an air quality test. She said she assumed there had been an air quality test because Mr. Hay had said he would have one done. Later Mr. Robicheau reported that the stain on the clothing was probably urine. Mr. Hay said he also indicated that no further testing was required. He said he passed on the NSRF results to Ms. Tingley, and she agreed that the cleanup could proceed. Mr. Hay said he did not place any restrictions on Mr. Robicheau's inspection, and that the defendants were prepared to follow any procedure Mr. Robicheau recommended.

[172] Mr. Robicheau said Mr. Hay asked specifically about air quality testing, and that he put no limits on the type or amount of testing, or the cost. Mr. Robicheau said the stains depicted on the May 11, 1994, video were not present during his inspection of the house. He said he told Mr. Hay that air quality testing would not be of any use, and recalled that Mr. Hay wanted him to do it anyway. He said he told Mr. Hay that he did not think there was anything in the house and that he did not believe further testing would find anything. He said he could not say the house was safe, only that he had not found anything to suggest it was unsafe.

[173] The defendants submit that Mr. Robicheau's advice, coupled with the fact that Mr. Hay had been in the house, and knew of other people who had been in the house, without experiencing ill-effects, and that the house was being or had been cleaned, would have provided a reasonable basis for the alleged statements, whether at the commencement of the cleaning or on November 21, 1991. Other than Ms. Tingley's allegations, the defendants say, there was no information available to Mr. Hay suggesting that the house was unsafe. As a result, if any representation about the safety of the house was made, it was made reasonably, even if it was erroneous.

[174] In the alternative, the defendants oppose the suggestion that the inaccuracy of the alleged representations could arise because of a predisposition to illness on the plaintiffs' part. In other words, it may be argued, after their first exposure, the plaintiffs were more susceptible to an extreme reaction from subsequent exposure

than a person without such exposure would have been. The defendants submit that even if such a predisposition existed, there would be no negligent misrepresentation. They say there is a distinction between statements that are true when applied to one person, but untrue when applied to others. For example, in *Dugas v. Boutilier* (1981), 45 N.S.R. (2d) 98 (S.C.T.D.), [1981] N.S.J. No. 366, the defendant sellers of a property represented to the plaintiff purchasers that they never had problems with their well, which was true. The purchasers found, however, that the well frequently ran dry. They had unusually high consumption needs which were not known to the defendants at the time of sale. An action for fraudulent misrepresentation was dismissed. By analogy, in this case the plaintiffs, through Dr. Fox's evidence, took the position that the house might be safe for a healthy person, but, due to their particular frailties, it was not safe for them. According to the defendants, a representation that the house was safe, in the absence of an indication that the plaintiffs were in a different medical position than anyone else, would be accurate, even if the house contained some latent toxicity.

Reasonable Reliance

[175] In order to prove that they relied reasonably on the representation, the plaintiffs must show that the representation had a substantial effect on their decision. Merely encouraging a course of conduct decided by the plaintiffs or confirming the plaintiffs' views is not enough to result in liability. This principle is summarized in Klar et al., *Remedies in Tort*, vol. II (Toronto: Carswell, looseleaf), at Ch. 16. IV, §22:

> For his action to succeed the plaintiff must rely on the defendant's misrepresentation and the reliance must be reasonable. Actual reliance is a necessary element of negligent misrepresentation without which the plaintiff's action cannot succeed. The misrepresentation need not be the decisive factor as long as it has a real and substantial effect on the plaintiff's decision. But where the plaintiff would have entered the transaction in any event and was merely encouraged or confirmed in his view by the misrepresentation, his action will not succeed. The defendant has the burden of displacing the plaintiff's assertion that, but for the defendant's misrepresentation, the plaintiff would not have entered into the transaction.

[176] An example of the importance of actual reliance is *Mariani v. Lemstra*, [2004] O.J. No. 4283 (Ont. C.A.) (application for leave to appeal dismissed, [2004] S.C.C,A. No. 355), where a claim of fraudulent or negligent misrepresentation was brought against a builder/seller by purchasers of a defective home. There was insufficient evidence that the statement "well built" was made to the plaintiff, and the Court also noted that the plaintiff had inspected the home and been advised by

her inspector that the home was "well built". The plaintiff had not relied on any representation concerning quality of construction.

[177] According to the defendants, the question, under the heading of reasonable reliance, is whether the evidence indicates that the plaintiffs would have remained in the house if Larry Hay and Donna Strong had remained silent. The defendants deny, of course, that any representation that the house was safe was made. In the event that such a representation was made, however, they deny that the plaintiffs relied on it. The plaintiffs re-entered the house before the alleged November 21, 1991, safety "guarantee." Also, Ms. Tingley had provided certain materials for testing to Dr. Amares Chatt at Dalhousie University. The defendants say that Ms. Tingley told S.Sgt. Marando on November 6, 1991, that she would "drop it all" if Professor Chatt's tests came back negative, which they did, with the testing being completed before November 20.

[178] The defendants say Ms. Tingley did not accept the Nova Scotia Research Foundation's conclusion that the substance could be urine and that she was not prepared to accept Mr. Hay's information. Therefore, they argue, she was not relying on Mr. Hay's alleged statement that the house was safe. Alternatively, they submit, she relied on the Nova Scotia Research Foundation's advice that the substance was urine, and not on any representation by Mr. Hay or Ms. Strong. As already noted, Ms. Tingley maintained that she relied on what Mr. Hay told her about the house. In the case of Margaret Burton, the defendants say she had been invited to stay in the house on numerous occasions by Ms. Tingley, and presumably she relied on Ms. Tingley's experience in the house to determine it was safe.

[179] The defendants' position is that the plaintiffs' decision to stay in the house was based on their own observations and feelings, along with the observations of the police and others who attended the home with no ill effects, and/or the independent testing by Dr. Chatt. They submit that Ms. Tingley, Mr. Smith and Ms. Smith decided to remain in the house before the November 21, 1991, meeting with Larry Hay and Donna Strong, on the basis that there were no smells, no stains and that they were suffering no symptoms. If any such smells, stains or symptoms had existed at that time, Ms. Tingley would likely have raised the matter with Mr. Hay before first doing so in 1993. As such, the defendants say, if there was any representation, which they deny, it confirmed a decision that the plaintiffs had already made.

[180] I would be satisfied, if all the other elements of negligent misrepresentation are present, the plaintiffs, and each of them, have established the element of reliance. Whether in the call from Mr. Hay advising that the cleaning was underway, or to the responses by Mr. Hay and/or Ms. Strong on November 21, the plaintiffs were proceeding on the basis of what Mr. Hay, and/or Ms. Strong, were telling them. There is nothing in the evidence to suggest otherwise. However, there remains the determination of whether the statements were made. If the statements attributed to Mr. Hay and/or Ms. Strong were made, the other necessary elements, apart from a duty of care and reliance, are also here present.

Causation

[181] If the plaintiffs prove that a negligent misrepresentation was made, the principles of causation still require them to establish a direct link between the representation and the damages claimed. The burden to prove causation belongs to the plaintiffs: *Anderson v. The Salvation Army Maternity Hospital et al.* (1989), 93 N.S.R. (2d) 141 (S.C.T.D.) at p. 163. The Supreme Court of Canada considered causation in *Snell v. Farrell*, [1990] 2 S.C.R. 311, [1990] S.C.J. No. 73. Sopinka J., for the court, said, at para. 26:

> Causation is an expression of the relationship that must be found to exist between the tortious act of the wrongdoer and the injury to the victim in order to justify compensation of the latter out of the pocket of the former. Is the requirement that the plaintiff prove that the defendant's tortious conduct caused or contributed to the plaintiff's injury too onerous? Is some lesser relationship sufficient to justify compensation? I have examined the alternatives arising out of [*McGhee v. National Coal Board*, [1973] 1 W.L.R. 1]. They were that the plaintiff simply prove that the defendant created a risk that the injury which occurred would occur. Or, what amounts to the same thing, that the defendant has the burden of disproving causation. If I were convinced that defendants who have a substantial connection to the injury were escaping liability because plaintiffs cannot prove causation under currently applied principles, I would not hesitate to adopt one of these alternatives. In my opinion, however, properly applied, the principles relating to causation are adequate to the task. Adoption of either of the proposed alternatives would have the effect of compensating plaintiffs where a substantial connection between the injury and the defendant's conduct is absent. Reversing the burden of proof may be justified where two defendants negligently fire in the direction of the plaintiff and then by their tortious conduct destroy the means of proof at his disposal. In such a case it is clear that the injury was not caused by neutral conduct. It is quite a different matter to compensate a plaintiff by reversing the burden of proof for an injury that may very well be due to factors unconnected to the defendant and not the fault of anyone.

[182] Causation was addressed again in *Resurfice Corp. v, Hanke*, [2007] 1 S.C.R. 333, 2007 SCC 7, in relation to a claim for manufacturer's negligence. McLachlin C.J.C., for the Court, set out the general principles of causation at paras. 21-23:

> First, the basic test for determining causation remains the "but for" test. This applies to multi-cause injuries. The plaintiff bears the burden of showing that "but for" the negligent act or omission of each defendant, the injury would not have occurred. Having done this, contributory negligence may be apportioned, as permitted by statute.
>
> This fundamental rule has never been displaced and remains the primary test for causation in negligence actions. As stated in *Athey v. Leonati*, [[1996] 3 S.C.R. 458] at para. 14, per Major J., "[t]he general, but not conclusive, test for causation is the 'but for' test, which requires the plaintiff to show that the injury would not have occurred but for the negligence of the defendant". Similarly, as I noted in *Blackwater v. Plint*, [[2005] 3 S.C.R. 3, 2005 SCC 58] at para. 78, "[t]he rules of causation consider generally whether 'but for' the defendant's acts, the plaintiff's damages would have been incurred on a balance of probabilities."
>
> The "but for" test recognizes that compensation for negligent conduct should only be made "where a substantial connection between the injury and the defendant's conduct" is present. It ensures that a defendant will not be held liable for the plaintiff's injuries where they "may very well be due to factors unconnected to the defendant and not the fault of anyone": *Snell v. Farrell*, at p. 327, per Sopinka J.

[183] Having set out the "primary test" for causation, the Chief Justice recognized that it may be appropriate to employ a "material contribution" analysis where the "but for" test is totally unworkable. She wrote, at paras. 24-28:

> … [I]n special circumstances, the law has recognized exceptions to the basic "but for" test, and applied a "material contribution" test. Broadly speaking, the cases in which the "material contribution" test is properly applied involve two requirements.
>
> First, it must be impossible for the plaintiff to prove that the defendant's negligence caused the plaintiff's injury using the "but for" test. The impossibility must be due to factors that are outside of the plaintiff's control; for example, current limits of scientific knowledge. Second, it must be clear that the defendant breached a duty of care owed to the plaintiff, thereby exposing the plaintiff to an unreasonable risk of injury, and the plaintiff must have suffered that form of injury. In other words, the plaintiff's injury must fall within the ambit of the risk created by the defendant's breach. In those exceptional cases where these two requirements are satisfied, liability may be imposed, even though the "but for" test is not satisfied, because it would offend basic notions of fairness and justice to deny liability by applying a "but for" approach.
>
> These two requirements are helpful in defining the situations in which an exception to the "but for" approach ought to be permitted. Without dealing exhaustively with the jurisprudence, a few examples may assist in demonstrating the twin principles just asserted.
>
> One situation requiring an exception to the "but for" test is the situation where it is impossible to say which of two tortious sources caused the injury, as where two shots are carelessly fired at the victim, but it is impossible to say which shot injured him: *Cook v. Lewis*, [1951] S.C.R. 830.

> Provided that it is established that each of the defendants carelessly or negligently created an unreasonable risk of that type of injury that the plaintiff in fact suffered (i.e. carelessly or negligently fired a shot that could have caused the injury), a material contribution test may be appropriately applied.
>
> A second situation requiring an exception to the "but for" test may be where it is impossible to prove what a particular person in the causal chain would have done had the defendant not committed a negligent act or omission, thus breaking the "but for" chain of causation.....

[184] According to the defendants, the impossibility described in *Resurfice* must be due to factors outside the plaintiff's control, so that a failure to collect or adduce sufficient evidence will not excuse a plaintiff from meeting the burden. The defendants say the plaintiffs have not adduced evidence that but for the defendants' actions, their alleged injuries would not have occurred. The claim, it is argued, is fatally flawed by the lack of any evidence as to what chemical, or combination of chemicals, caused the alleged symptoms and illnesses, and, in the face of such unknowns, how the defendants should have acted differently and how different actions would have changed the outcome.

[185] In the absence of evidence that there was a toxin or toxins in the house in 1991, the plaintiffs argue that causation should be inferred because they were not ill before September 1991 and they were ill after that. Therefore, they submit, they must have gotten sick because of the substance they claim was spread in the residence during the break-and-enter.

[186] According to the defendants, the evidence at trial established that the plaintiffs were not ill immediately after the exposure and there are plausible alternative explanations for symptoms they claimed to suffer years later. The defendants submit that arguments similar to that advanced by the plaintiffs - that their alleged illness must have resulted from the defendants' negligence - have been rejected in similar cases. In *Seiler v. Mutual Fire Insurance Company of British Columbia*, 2003 BCSC 1423, [2003] B.C.J. No. 2151 (B.C.S.C.) (application to extend time for service of notice of appeal dismissed, 2003 BCCA 696; application for leave to appeal dismissed, [2004] S.C.C.A. No. 60) the plaintiffs alleged that water damage to their home was not prevented by insurance adjusters and that the presence of water caused the growth of toxic mould which, in turn, caused health problems for them and their children and ultimately obliged them to sell their home and move. Dealing with a defence motion to dismiss at the end of the plaintiffs' case, the trial judge said, at paras. 29-32:

> Plaintiffs' counsel argued the fact the defendants "took control" of the house after the flooding incidents meant that failure by the defendants to restore the house to safe habitable condition is a basis for inferring negligence on the part of the defendants, without the necessity of the plaintiffs proving their theory that toxic mould was the cause of the family members' ill health.
>
> This is a classic "bootstrap" argument: because the family got sick after the defendants took control of restoration of the house the defendants' actions or omissions in restoration of the house must be negligent.
>
> The standard of care implicit in this proposition is that a competent and experienced adjuster and contractor would ensure the eradication of any possible unobserved health hazard which may have been caused by water damage.
>
> The defendants' counsel's responses are that there is no evidence of any standards of care, no evidence that the defendants failed to meet the requisite standards of care nor any evidence that if the defendants had met whatever standards of care the law imposes on them as professionals, all toxic mould or any other health hazards in the house would have been eradicated, if indeed any such mould or other hazards had started to develop when the house was flooded.

[187] The trial judge concluded that the defendants' no evidence motion should succeed, holding that expert evidence was necessary to establish the standards of care applicable to the defendants in carrying out their functions in regard to the plaintiffs' claim against the insurer. There was no expert evidence on this point (para. 38).

[188] In *MacIntyre v. Cape Breton District Health Authority*, 2009 NSSC 202, [2009] N.S.J. No. 296 (S.C.), the plaintiff claimed to suffer from environmental illness caused by chemical exposure during renovations to the hospital where he worked. Two medical experts felt his condition was caused by such an exposure because his symptoms began afterward and traces of heavy metals were found in his blood. MacLellan J. rejected these opinions and found that the plaintiff did not meet the "but for" test. The experts had assumed that the chemicals in the plaintiff's blood appeared as a result of the renovations because symptoms commenced afterward and because other people who worked in the same hospital also complained of symptoms. MacLellan J. held that this evidence did not provide the causative link needed to establish liability. He said, at paras. 290 and 297:

> I understand Dr. Boucher's opinion about the cause of the heavy metals to be simply based on the fact that 11 employees he saw as patients all have similar symptoms and all worked at the hospital during the time of the renovations, therefore the renovations must have been the cause of the symptoms. I am not prepared to accept that as a logical conclusion.
>
> ….

> I am not convinced that Dr. Boucher's opinion that the plaintiff's medical problems as he found them in May, 2003 were attributable to the renovations at the hospital in July of 2001 should be given any weight. To say that simply because a number of people got sick who all work at the hospital and therefore the renovations caused the sickness fails to consider the fact that the testing done at the hospital did not disclose the presence of any heavy metals either in the air or the materials which would make up the walls and floors demolished in the renovations.

[189] The defendants submit that the plaintiffs are advancing a "boot strapping" argument similar to those in *Seiler* and *MacIntyre*: because they are sick, Mr. Hay must have made a negligent misrepresentation and their illnesses must have been caused by toxic chemicals spread in the house in September 1991. The defendants maintain that the plaintiffs have no evidence that a toxic chemical was ever in the house. Just as the plaintiff in *MacIntyre* could not demonstrate that chemicals were present in dust he breathed at the hospital, the plaintiffs have not provided any evidence to show what, if anything, was in the air they breathed in their home in 1991. As such, there is no evidence as to whether anything spread in the home caused their alleged conditions.

[190] On causation, the plaintiff cites *Pack v. Warner (County)*(1964), 44 D.L.R. 215, 1964 CarswellAlta 14 (Alta. S.C.A.D.), where the plaintiff rancher had his cattle sprayed for lice by a county official, after which the animals became ill. The spray the official used was not intended for such use. Athough there was disputed opinion evidence as to whether the illness was caused by the spray, the Appeal Division stated that the trial judge had "found that the animals were suffering from organo-phosphate poisoning as a result of the spraying and I am quite satisfied that there was evidence upon which he could so find" (para. 23). Smith C.J.A., for the court, went on to say, at para. 26:

> In my view, there was evidence not only pointing but pointing strongly to the liability of the defendants, the county and Michelson, and, with respect, I agree with the conclusions of the learned trial judge as to the liability of these defendants. Michelson, from Dr. Haufe's pamphlet on the control of cattle lice, knew or should have become aware that this toxic substance malathion should be used in accordance with the instructions on the label. The label gave no indication or suggestion that the substance, Shell malathion, was safe for use as a spray for the control of lice upon livestock. To the contrary, it indicated quite plainly that inhalation of the spray and skin contact were to be avoided, that the substance was harmful if swallowed and that improper use might cause cholinesterase inhibition, but notwithstanding, Michelson not only sprayed the plaintiff's 47 bulls with malathion spray, but did so under a pressure of 400 pounds per square inch, and in such a fashion that the bulls received substantial quantities of the spray upon their skins. There was no evidence that Michelson was qualified to judge whether it was safe to use Shell malathion for the spraying and his inquiries as to malathion and its safety as an insecticide for use on animals appear to me to have been casual to the point of carelessness. He had never seen a qualified person spray cattle with malathion before he used it for that purpose and he is uncertain as to whether he ever saw a demonstration of spraying with malathion. I am quite

> satisfied that there was ample evidence upon which negligence on Michelson's part could be found.

[191] *Pack* is of limited guidance here, given that in that case the issue was whether a specifically identified substance caused the illness of the cattle. Here there is no specifically identified substance other than possibly urine.

[192] The plaintiffs cite *Athey v. Leonati*, [1996] 3 S.C.R. 458, for the proposition that tortfeasors will be liable if they aggravate a non-tortious cause. Anticipating that the defendants would argue that their illnesses arose from the initial exposure, before the clean-up, the plaintiffs submit that "even if there might have been some health effect lingering from the initial exposure, [it] was significantly exacerbated, if not solely caused, by returning to the low levels of contamination remaining after the clean-up."

[193] Dr. Cullen's reports, and his evidence, advance the view that Dr. Deagle incorrectly told the plaintiffs that there were toxins in their house that had caused them to suffer from environmental illness, and that each of the plaintiffs gradually accepted this "paradigm," which was reinforced by treating physicians and by the plaintiffs' own belief in it. The defendants say that Dr. Cullen's opinion of the "paradigm" allegedly developed by Dr. Deagle and continued by other doctors is consistent with various circumstances in the case, including the lack of medical evidence of environmentally-related health issues between 1991 and 1993; the expanded content of the claim after consulting Dr. Deagle; and the alleged failure of the defendants to inform Mr. Hay about their alleged health issues before Ms. Tingley consulted Dr. Deagle.

[194] The plaintiffs say Mr. Hay deliberately withheld information from Ms. Tingley because he knew she would not agree to proceeding with the cleaning of the house if she was told that no air quality testing was done. They say Mr. Hay attributed the smell and Ms. Tingley's health effects to cleaning materials even though he knew that no testing had been done in the house and all that Michael Robicheau could say was that there was a substance on one of five samples provided to him that might be urine. They say he denied asking Mr. Robicheau to test for urine. According to the plaintiffs, "there was more than one substance observed, and no one ever identified what they were". Further, Mr. Hay "was aware that there was a suggestion that the substance was a pesticide. Although that

was only a possibility, it was the one thing that had been suggested that could.... possibly cause the health effects complained of."

[195] As to the suggestion that the plaintiffs' complaints are "a psychosomatic reaction", the plaintiffs submit that the defendants would be liable even if this were the case. Since it was not proven that the house was safe, the plaintiffs were left with a "Sword of Damocles" hanging over their heads, which "may have contributed to any so called psychosomatic manifestations but we have no medical or other evidence to support this. Of course, even if this [were] the case, the Defendants are still liable for [an] effect on the Plaintiffs akin to infliction of nervous shock." As such, "even if this was 'all in their minds', it has and continues to have a direct impact on the health and well being of the Plaintiffs, for which Wellington and Hay are responsible in law based on negligent misrepresentation."

[196] Even if there were pre-existing conditions, the plaintiffs say, *Athey v. Leonati* confirms that where tortious and non-tortious causes exist, the tortfeasor is liable except in cases of "crumbling skulls," which were not present here. In other words, the plaintiffs submit, "it does not [lie] in the mouths of the Defendants to complain if the Plaintiffs' doctors are wrong, or any of their symptoms were aggravated or contributed to by any of the medical treatment they received." In summary, the plaintiffs say, "[w]hether the present manifestations were caused in whole or simply in part by the substances that were in the home or by the perception of same is moot."

[197] The plaintiffs cite no authority for the apparent proposition that even if there were no toxins spread in the house, the defendants are nevertheless liable for their present ill health because they suffered from “a perception” that such chemicals had been spread, which perception the defendants did not satisfactorily allay. The authorities do not support such a legal principle. The inability to allay another’s fears is not, of itself, a negligent misrepresentation.

Equitable Fraud

[198] In addition to negligent misrepresentation, the Plaintiffs allege that the defendants have committed equitable fraud as described in *Derry v. Peek* (1889),

14 App. Cas. 337 (H.L.). The plaintiffs submit that the alleged statements by Mr. Hay were reckless, "given the limited test that [Mr. Hay] had conducted and the significant potential risk that was identified both by the Plaintiffs, the RCMP and as evidenced by the threats, break in and vandalism." This "reckless" statement, they assert, amounts to equitable fraud within the meaning of *Derry v. Peek*.

[199] The doctrine of equitable fraud is discussed in Lewis N. Klar, *Tort Law*, 4th edn. (Toronto: Thompson Canada Limited, 2008), at p. 674:

> The tort of deceit depends upon strict proof that the defendant's representations were made fraudulently. In *Derry v. Peek*, the Lords made it clear this required that the defendant must have made the statement knowing that it was false, or with reckless disregard of the truth or falsity of the representations. Mere negligence with respect to the truth of the representation was not sufficient. Canadian Courts have affirmed this aspect of the tort. It has been held that negligence, carelessness and wishful thinking do not amount to fraud. There must be 'moral recklessness and a callous disregard as to whether the statement is true or false'. Although the defendant's assertion of an honest belief in the truth of the statements will be tested by reference to a standard of reasonableness, the issue ultimately is not whether the defendant was unreasonable, but whether knowingly, or with careless disregard for the truth, the defendant made the false statements.

[200] In Klar et al., *Remedies in Tort*, vol. I (Toronto: Carswell, looseleaf), the authors point out, at p. 5-25, that "careless" in this context does not mean "without taking care", but rather "not caring" whether a statement is true or false.

[201] The key to equitable fraud under the *Derry v. Peek* doctrine is that the defendant, when making the statement, did not honestly believe it to be true. In *Aucoin v. Young*, [1988] N.B.J. No. 237 (N.B.C.A.), the court cited Cheshire and Fifoots' *Law of Contract*, 9th edn., at page 256:

> Fraud in common parlance is a somewhat comprehensive word that embraces a multitude of delinquencies differing widely in turpitude, but the types of conduct that give rise to an action of deceit at common law have been narrowed down to rigid limits. In the view of the common law, 'a charge of fraud is such a terrible thing to bring against a man that it cannot be maintained in any court unless it is shown that he had a wicked mind'. Influenced by this consideration, the House of Lords has established in the leading case of *Derry v. Peek* that an absence of honest belief is essential to constitute fraud. If a representer honestly believes his statement to be true, he cannot be liable in deceit, no matter how ill-advised, stupid, credulous or even negligent he may have been. Lord Herschell, indeed, gave a more elaborate definition of fraud in *Derry v. Peek*, saying that it means a false statement 'made (1) knowingly, or (2) without belief in its truth, or (3) recklessly, careless whether it be true or false,' but, as the learned judge himself admitted, the rule is accurately and comprehensively contained in the short formula that a fraudulent misrepresentation is a false statement which, when made, the representer did not honestly believe to be true.
>
> The important feature of this decision is the insistence of the House of Lords that the distinction between negligence and fraud must never be blurred. Fraud is dishonesty, and it is not necessarily

> dishonest, though it may be negligent, to express a belief upon grounds that would not convince a reasonable man.

[202] Numerous authorities confirm that a fraudulent statement must have been made without an honest belief in its truth: see, for instance, *O'Hara v. Chez Chapeaux Limited* (1977), 23 N.S.R. (2d) 610, [1977] N.S.J. No. 579 (S.C.T.D.) and *Morash v. Morash* (1977), 27 N.S.R. (2d) 47, [1977] N.S.J. No. 661 (S.C.T.D.). In *TransAmerica Life Insurance Co. of Canada v. Hutton*, [2000] O.J. No. 2240 (O.S.C.), Cullity J. cited *Halsbury's Laws of England*, 4th edn., vol. 31, at para. 1059, for the statement that "[p]roof of absence of actual and honest belief is all that is necessary to satisfy the requirements of the law, whether the representation has been made recklessly or deliberately…." In *Thomas v. Whitehouse*, [1979] N.B.J. No. 41 (N.B.C.A.) the New Brunswick Court of Appeal comments on the threshold for fraud at paragraph 23:

> . . . A representation that a particular opinion is entertained is a representation of fact and may be shown to be a fraudulent misrepresentation if there be evidence that no such opinion was actually entertained. The mere expression of an opinion honestly held is not fraudulent even if the opinion is erroneous, [1927] A.C. 177 at 182. Lord Moulton in *Heilbut, Symonds & Co. v. Buckleton*, [1913] A.C. 30, at 51 stated:
>
> > "a person is not liable in damages for an innocent misrepresentation, no matter in what way or in what form the attack is made."

[203] The distinction between fraud *simpliciter* and equitable fraud appears to be that in the first case the defendant knows the statement is false, while in the second, although it cannot be proven that the defendant knew the statement was false, it does not appear that there was an honest belief in its truth. If a representor honestly believes the statement is true he will not be liable in deceit or fraud "no matter how ill-advised, stupid, credulous or even negligent he may have been", in the words of Cheshire and Fifoot.

[204] The defendants submit that the plaintiffs' claim of equitable fraud is redundant in view of the negligent misrepresentation claim. If the negligent misrepresentation claim fails, they suggest, the equitable fraud claim must also fail, because proof of negligence does not prove fraud, and if the plaintiff does not establish negligence, then fraud must be eliminated as well.

[205] However, the proposition, that without negligence there cannot be fraud, does not appear supportable. One can be aware that they have no basis for the statement they make, i.e. no honest belief, and yet, knowingly and intentionally

proceed to make the statement. Such a statement would not appear to have been negligently made and yet possibly could be fraudulent within the meaning in *Derry v. Peek.*

[206] In the absence of a factual basis for finding that an honest belief existed, evidence that a defendant knew of facts suggesting that the statement was false, and did not possess any information to contradict those facts, might establish equitable fraud. The defendants say that there are facts in evidence that would provide Mr. Hay with a reasonable basis for believing the plaintiffs' house was safe. These have been reviewed earlier in respect to negligent misrepresentation. The Defendants rely on their arguments against negligent misrepresentation in response to the allegation of equitable fraud. The defendants also say the plaintiffs offer no evidence that Mr. Hay did not hold an honest belief in any statement that he made.

[207] The plaintiffs cite *862590 Ontario Ltd. v. Petro Canada Inc*. (2000), 33 C.E.L.R. (N.S.) 107, 2000 Carswell Ont. 937 (Ont. Sup.Ct.), as providing "a helpful discussion of fraud and negligent misrepresentation. However, it appears this case rather than discussing equitable fraud or *Derry v. Peek* focuses on the element of fraud/fraudulent misrepresentation, as well as "fraud by active non-disclosure." They cite *Williamson Brothers Construction* (1990), 41 C.L.R. 192, 1990 CarswellBC 699 (B.C.S.C), for the proposition that non-disclosure of the possibility of danger can go beyond negligence to recklessness. The court in *Williamson Brothers* reviewed the law and held that, "[i]f Williamsons established that Highways had a reckless disregard for Burke's directive, and thus for the lives and safety of the workers in the quarry, then, in my view, fraud is established. That reckless disregard must, however, be strictly proven" (para. 52).

Effect of the Non Suit Decision

[208] In his post-trial submission, counsel for the plaintiffs, referencing the court's decision on the defendants' non suit motion (see 2009 NSSC 248) notes, correctly that the findings of fact on the non suit motion "were based on the legal test of a common sense screening of the evidence without findings of credibility or an assessment vis a vis other evidence, given by the plaintiffs and other witnesses during their case in Chief." However, the submission continues:

> The facts set out in your decision, in our respectful submission, are still applicable and we would respectfully submit that those facts, for the most part, have not been called into question by the Defendants, through their evidence. . .
>
> Further, based on the Non-Suit Decision, there has already been a finding on each of the five elements as set out in .... Queen v. Cognos Inc. .... which should not be reviewed nor reversed absent some material change in the findings of fact.

[209] There were no findings of fact on the non suit motion. In this regard I reference paras. 71 and 72 of the reasons on the non suit motion:

> I have not weighed the evidence, but have simply considered whether the evidence, if believed, could support the inferences sought by the plaintiffs. As to the reference to "facts adduced," I note that this does not mean that any facts have been proven, as these would be findings to be made only after conclusion of the trial. I have not weighed the evidence, beyond a "threshold common-sense screening ... to ensure that it has some meaning and is not fanciful or ridiculous," as described in *Petten, supra.* at paragraph 10.
>
> In referencing a *prima facie* case I have simply assessed the evidence as presented by the witnesses, together with the exhibits. Where there are suggestions of inconsistency in the evidence of a witness, such as where the witness allegedly said different things on different occasions, either in writing or on discovery, I have considered their evidence at trial in determining whether, if a jury accepted it, there is a sufficiency of evidence that a properly instructed jury, could decide in the plaintiff's favor. This is not to say that a properly instructed reasonable jury would decide in the plaintiffs' favor, simply whether they could so decide. I emphasize that at this stage of the trial, there are no facts. There is only evidence, which, if believed by the trier, could become facts in assessing whether the plaintiffs will succeed.

[210] The onus on the parties in a civil proceeding is not altered by the dismissal of a non-suit motion. It is only affirmative findings, on such a motion, that would be relevant in reaching conclusions at the end of the trial. In this instance, the only relevant findings relate to the causes of action on which the motion was successful. In reaching a conclusion on the causes of action for which the motion was not successful, the facts are determined on the evidence as a whole, and the onus and burden remains as it was at the commencement of the trial.

Credibility and Fact-Finding

[211] As to credibility and fact finding, in *R. v. White*, [1947] S.C.R. 268 (S.C.C.), at p. 272, Estey, J. commented:

> The issue of credibility is one of fact and cannot be determined by following a set of rules that it is suggested have the force of law and, in so far as the language of Mr. Justice Beck may be so construed, it cannot be supported upon the authorities. Anglin J. (later Chief Justice) in speaking of credibility stated:
>
> > by that I understand not merely the appreciation of the witnesses' desire to be truthful but also of their opportunities of knowledge and powers of observation, judgment and memory - in a word, the trustworthiness of their testimony, which may have depended very largely on their demeanour in the witness box and their manner in giving evidence. *Reymond v. Township of Bosanquet* [(1919) 59 Can. S.C.R. 452, at 460.].
>
> The foregoing is a general statement and does not purport to be exhaustive. Eminent judges have from time to time indicated certain guides that have been of the greatest assistance, but so far as I have been able to find there has never been an effort made to indicate all the possible factors that might enter into the determination. It is a matter in which so many human characteristics, both the strong and the weak, must be taken into consideration. The general integrity and intelligence of the witness, his powers to observe, his capacity to remember and his accuracy in statement are important. It is also important to determine whether he is honestly endeavouring to tell the truth, whether he is sincere and frank or whether he is biassed, reticent and evasive. All these questions and others may be answered from the observation of the witness' general conduct and demeanour in determining the question of credibility.

[212] These comments on the assessment of credibility continue to be referred to by Canadian courts. (See, for instance, *R. v. Sparks*, 2006 NSPC 45 (N.S. Prov. Ct.) at para 20 and *R. v. Al Jamail*, 2006 ABPC 292 (Alta. Prov. Ct.) at para 34).

[213] In *Lockhart v. Lockhart*, 2008 NSSC 271, [2008] N.S.J. No. 393 (S.C.), at para. 102, Warner J. made the following remarks about the assessment of credibility:

> There are many tools for assessing credibility. First is the ability to consider inconsistencies and weaknesses in the witness's evidence, including internal inconsistencies, prior inconsistent statements, inconsistencies between the witness' testimony and the testimony of other witnesses. Second is the ability to review independent evidence that confirms or contradicts the witness' testimony. Third is the ability to assess whether the witness' testimony is plausible or, as stated by the British Columbia Court of Appeal in 1949 in *Faryna v. Chorny* [1952] 2 D.L.R. 354 it is "in harmony with the preponderance of probabilities which a practical [and] informed person would readily recognize as reasonable in that place and in those conditions", but in doing so I am required not to rely on false or frail assumptions about human behavior. Fourth, it is possible to rely upon the demeanor of the witness, including their sincerity and use of language, but it too should be done with caution. Fifth is a special consideration that must be given to the testimony of witnesses who are parties to proceedings; it is important to consider the motive that witnesses may have to fabricate evidence.

[214] The dangers of excessive reliance on evidence of demeanour are well-known. The Ontario Court of Appeal commented in *R. v. Norman* (1993), 87 C.C.C. (3d) 153, [1993] O.J. No. 2802, on a situation where "the appearance of

honesty and integrity" on the part of certain witnesses provided "little assistance in assessing the reliability of their testimony," since "these witnesses believe in what they are saying, whether it is accurate or not" (para. 43).

THE PLAINTIFFS' HEALTH

[215] The defendants say that none of the plaintiffs suffer from Multiple Chemical Sensitivity, and that if any of them suffer from that condition, it cannot be connected to any exposure to a toxin at the house on Silistria Drive. Dr. Mark Cullen, the expert called by the defendants left open the possibility Ms. Burton suffered from Multiple Chemical Sensitivity, but believed it would have occurred before the exposure. The principal medical expert on behalf of the plaintiffs was Dr. Roy Fox.

The Credentials of Drs. Fox and Cullen

[216] The defendants submit that based on Dr. Cullen's qualifications and experience, compared to those of Dr. Fox, in any area where their evidence conflicts, Dr. Cullen's views and findings should be accepted.

[217] Dr. Fox's medical specialty is gastroenterology. He is not a toxicologist and he agreed he is not an expert on how chemicals in body fluid affect human health. After developing Multiple Chemical Sensitivity, he spent a year (1992-1993) training at the Environmental Health Centre in Dallas, functioning somewhat like a resident. He did not receive any certification or credentials. In 1995 Dr. Fox took ten days of courses through the International Board of Environmental Medicine, which is not recognized by the American Board of Medical Specialties. In 2001 he obtained a Master's degree in Environmental Studies. This is not a medical degree.

[218] Dr. Fox began seeing environmental patients in September 1994. The plaintiffs were among his first patients. He stated that since 1994/1995 he has learned more about chemicals and their effects on human health. He testified that he would delete portions of his January 17, 1995, report in view of changes in his views arising from additional knowledge. Specifically, he would not now rely on the AccuChem blood tests or the information from Fenwick Laboratories, and he would not refer to a "chemical soup."

[219] Dr. Cullen has credentials in occupational and environmental medicine, internal medicine, epidemiology and public health. Since 1980 he has worked exclusively with environment-related health conditions, including Multiple Chemical Sensitivity. He has also done research in these fields. Dr. Cullen was involved in the recognition of Multiple Chemical Sensitivity as a defined illness/condition. In 1980 he established the Yale Occupational and Environmental Medicine Program, serving as its director until 2009. He has experience in assessing industrial and residential sites for environmental quality in relation to health.

Pat Tingley

[220] Ms. Tingley testified that from the time she entered her house on September 28, 1991, until she and the children went to the IWK hospital on September 30, she did not feel well. She said she experienced burning eyes and throat, intense thirst, a taste in her mouth, tiredness and headaches. On cross-examination she was confronted with statements she made on discovery to the effect that she only told Dr. Grover, who asked if she had any symptoms, that she had a mild headache. She stated on discovery in a separate proceeding against Canada Life for reinstatement of disability payments (which was ultimately successful) that the headache might have been caused by being up all night inspecting the house to see what was missing. The defendants say it is inconceivable in the circumstances that Ms. Tingley would go to the Emergency Room and not discuss with any physician the symptoms she alleges she was experiencing, even if, as Ms. Tingley pointed out, it was a children's hospital.

[221] Ms. Tingley also stated on cross-examination that before October 13, 1991, she was "sick as a dog" and was suffering from headaches, earaches, red ears, diarrhea, cramps, thirst, burning throat, burning eyes, a taste in her mouth, chills and flushing. She attributed her sickness and symptoms to chemicals spread in her house. She testified that this information was communicated to Larry Hay by October 13, 1991.

[222] On September 19, 1991, Ms. Tingley applied to Canada Life for disability insurance. She met with a nurse on October 17, 1991. She stated on cross-examination that she reported to Canada Life that her house had been sprayed with a toxin that had made her sick, and that she described her symptoms. The defendants submit that in the month after the break-in, Ms. Tingley was not

sick. They cite her statement on discovery in the Canada Life proceeding in January 13, 1997, that "I'm not sick." On discovery in the Canada Life action she said that while attempting to schedule a meeting, she told the nurse that there had been a break-in at her home and that her son was ill, but did not say that she was concerned about possible contamination in the house. She said she was unsure whether she had provided details linking the break-in and her son's illness. She also said she did not mention her own symptoms.

[223] Dr. Greg Roy, Ms. Tingley's family doctor in 1991, was not called to testify as to Ms. Tingley's health before and after the alleged exposure, although he had been her family doctor since 1974. Ms. Tingley agreed on cross-examination that her only medical visit between September 28 and December 31, 1991, was to Dr. Roy on October 2. She did not agree that Dr. Roy did not believe she had been poisoned by toxins in her house, even after being referred to a chart note of the psychologist Dr. Barbara Fox indicating that she told Dr. Fox that Dr. Roy did not believe she had been poisoned. Ms. Tingley agreed on cross-examination that Dr. Roy was the one doctor who could speak to her health before and after the alleged toxic exposure. According to Dr. Roy's records, Ms. Tingley reported on October 2, 1991, that her home had been broken into and sprayed with a chemical and that she had headaches, a sore throat and dysuria. However, the defendants point out, Dr. Roy billed MSI for "adjustment reaction," as he had for two visits in August 1991.

[224] In further support of their claim that Ms. Tingley was not ill, the defendants point to the evidence of Kim Tingley that he did not recall his sister having symptoms while he was living in the Smith home, as well as that of Paula Robbins, Kelli Smith's friend, who stated on cross-examination that she was in the house during the two weeks after the break-in and none of the family appeared to be sick. Mr. Hay testified that when he was in the house on September 30, 1991, Ms. Tingley did not tell him that anyone was ill, and denied that she had told him about symptoms prior to October 13. He said the only symptoms of which he had been aware were a rash, allegedly from putting on a shirt, and skin burning. He also testified that Ms. Tingley did not raise any such issues when he and Donna Strong were at the house on November 21, 1991.

[225] Dr. Roy Fox believed that there was a change in Ms. Tingley's health after she went back into the house on September 28, 1991, and that this change supported her claim that there was a toxin spread in the house. He described three

stages of changes in her health. He said the initial illness occurred within 48 hours of returning to the house, and consisted of general debility, diarrhea and respiratory problems. The second stage consisted of severe bladder irritation with constant urinary tract infections. The third stage of change involved the development of various symptoms in 1992. On cross-examination Ms. Tingley denied reporting debility, diarrhea and upper respiratory problems within 48 hours of entering the house. Dr. Fox testified that his notes and recollections indicated that she did report these symptoms to him as having arisen within 48 hours of entering the house.

[226] There is dispute over how long Ms. Tingley suffered from diarrhea after the alleged exposure. Dr. Fox testified that his understanding was that she experienced diarrhea for two weeks, which he regarded as significant. He did not believe that two or three days of diarrhea - the duration the defendants maintain is accurate - would be significant. She said on discovery , "[t]wo days diarrhea. Headaches had passed by then. She's referring to Todd." The defendants assert that these statements on discovery in the Canada Life action demonstrate that in January, 1997, Ms. Tingley was clear that she suffered two or three days of diarrhea, not two weeks. The defendants also note that Ms. Tingley was taking the antibiotic Amoxil around the time she claims to have had diarrhea. Dr. Fox testified that if she had diarrhea for two or three days, that could have been related to the Amoxil, of which it is a common side effect.

[227] On cross-examination, Ms. Tingley said she was wrong in the discovery when she said she had two or three days of diarrhea. She said two weeks would be more accurate. Ms. Tingley said she had severe diarrhea, which was foul smelling, lime green in colour, with steam or foam. Kelli Smith recalled her mother experiencing diarrhea when they were at Donna Mackay's house, before they moved to the Cambridge Suites. She described it as greenish, grey, and brown with a film on top. She said this occurred when they were at the hotel and when they later returned to the house. Ms. Tingley went to Sydney after leaving Cambridge Suites. She said the diarrhea had ended by the time she left the Cambridge Suites and went to Sydney. Ms. Tingley said her bladder problems began not long after the diarrhea, also while she was residing at Cambridge Suites. However, there was no blood in her urine until later, in 1992 or 1993, becoming serious in 1993. She agreed on cross-examination that she did not visit a doctor on account of these symptoms.

[228] Dr. Fox testified that when he saw Ms. Tingley on November 17, 1994, she did not tell him that she had a respiratory infection that required antibiotics in the days before the alleged exposure. He said symptoms from such an infection would be evidence that respiratory problems were not related to exposure to a chemical. Dr. Cullen testified that headaches and sore throat can be associated with upper respiratory infection. He also also testified that green oily stools were not a likely indicator of a toxin or chemical exposure, but are common in viral infections. Like Dr. Fox, he said diarrhea can be a side effect of Amoxil.

[229] Dr. Fox testified that he understood Ms. Tingley started losing weight immediately upon returning to the house in late September 1991. On cross-examination, when shown Dr. Fox's report of November 17, 1994, Ms. Tingley said she could not recall if she lost weight in the two to three weeks after returning to the house. She did not dispute the Canada Life records, which indicated that she gained weight around this time. Dr. Fox agreed that the account of her weight fluctuation given by Ms. Tingley at trial - that she had periods of weight loss in 1993 and in 1995- and the information in the Canada Life documents gave a different impression than his previous understanding, and was a consideration that might change his opinion.

[230] Based on the account he was given by Ms. Tingley, Dr. Fox testified, he understood that her bladder infections and urinary symptoms occurred within a few weeks of her return to the house, after she had suffered from diarrhoea. He said it would be a significant fact if she did not have bladder problems at that time. Dr. Fox was also unaware that Ms. Tingley had a history of urinary tract infections before September 1991, and that she had seen Dr. Roy on that account. Dr. Fox testified that based on the records he saw at trial, it appeared that the urinary tract infections did not constitute a change in health after the alleged chemical exposure.

[231] Dr. Joseph Lawen, a urologist to whom Ms. Tingley was referred by Dr. Deagle, testified that Ms. Tingley told him that the chemical toxins spread in her home were Zylene and Trimethylbenzene, and that she wanted him to determine whether there was a relationship between her bladder problems and the chemicals she believed were in her blood. He indicated that he was not qualified to speak to this, and recommended that she see Dr. Jean Gray, a toxicologist. After she saw Dr. Gray, Ms. Tingley returned to Dr. Lawen. He testified that Ms. Tingley did not tell him that Dr. Gray did not regard the AccuChem blood reports as evidence of a chemical exposure, nor did she believe that the chemicals mentioned in the report

were evidence of toxicity. Her assessment, on September 7, 1993, revealed nothing of concern. Dr. Lawen assessed Ms. Tingley again on December 1, 1993. He reported that her "bladder symptoms have become a significant concern since the summer and were not a problem prior to that." He testified that his conclusion, based upon his encounter with Ms. Tingley, was that the bladder symptoms did not start until the summer of 1993. Dr. Lawen stated that during the period when Ms. Tingley consulted him - between September 1993 and August 1995 - he found no reason to link her bladder complaints to a toxic exposure. He testified that her problems were common ones for women in his practice.

[232] Dr. Fox testified that he never received Dr. Lawen's records and he was not told that Dr. Lawen did not link Ms. Tingley's bladder complaints to a toxic exposure.

[233] Dr. Jennifer Klotz, a dermatologist consulted by Ms. Tingley, wrote in her August 22, 1994, report, *inter alia*, that Ms. Tingley experienced "general weakness" after leaving the house, around the same time as the diarrhea and various other symptoms. On cross-examination, Ms. Tingley claimed that there were errors in Dr. Klotz's report, but said she was "weak " at the time indicated. On discovery in the Canada Life proceeding, she denied having experienced "general weakness" at that time, but said she may have been weak from diarrhea. She denied making various other statements that appear in Dr. Klotz's report, such as the claim that her house was "sealed off" and that her neighbours were having symptoms.

[234] Both Dr. Klotz and Dr. Bruce Elliott stated in their reports that Ms. Tingley said she experienced grey and peeling skin after the alleged exposure. Ms. Tingley testified that this was incorrect. She had made a similar denial on discovery in the Canada Life proceeding. Dr. Fox testified that his information respecting Ms. Tingley’s skin problems came from her reports to him, not personal observation. He did not know that she had seen a dermatologist, Dr. C.J. Gallant, in March 1992, and that Dr. Gallant had provided a report to Dr. Greg Roy. On being shown this report, Dr. Fox said the skin problems Ms. Tingley described to him in 1994 were different from those she had reported to Dr. Gallant. Dr. Gallant wrote that Ms. Tingley complained of "ongoing dryness, changes in the veins on her legs and areas of redness on her right buttock and left leg. The eruptions and changes seem to be more prominent after showering, and the right leg can become quite painful. The changes are not persistent and clear from time to time leaving no obvious

residue. She claims to be otherwise well at this time with no systemic long term complaints." Dr. Fox stated that March 1992 - when Ms. Tingley told Dr. Gallant that she had no "systemic" complaints besides skin problems - was within the time period during which he had understood her health to be deteriorating.

[235] At the time of the alleged exposure, Ms. Tingley ran her own company, Nova Rehabilitation. She testified that between September 1991 and June 1994 the business provided steady income. She conducted a marketing campaign in early 1994, and anticipated hiring new employees. She said she was working up to 12 hours per day at that time. Dr. Fox testified that this evidence was contrary to his previous understanding of her situation, and that these facts did not suggest that she was incapacitated by illness. Dr. Cullen agreed that this evidence was inconsistent with her having been ill and unable to tolerate most environmental exposures.

[236] Ms. Tingley testified that she had no drug sensitivities until 1994, and that she was able to eat a normal diet, wear regular clothes, sleep in her own bed and carry out day-to-day activities until June 1994. They defendants say this level of activity is not consistent with the restrictive lifestyle she claimed she was forced to lead. They maintain as well that Ms. Tingley had no health problems in September 1995.

[237] Dr. Fox testified that when he saw Ms. Tingley for the first time, on November 17, 1994, she had no food intolerances and she smoked cigarettes. He observed no cognitive problems. Ms. Tingley testified that she continued to smoke until 1997, contrary to medical advice, and reported no health improvement when she stopped. Dr. Cullen viewed the ability to tolerate cigarette smoke as a factor making a diagnosis of MCS less likely.

[238] Dr. Fox testified that the information at trial led him to conclude that Ms. Tingley did not experience the change in health that he had originally believed to have occurred, and which formed the basis for his view that there had been a chemical exposure in the house. He said the information he received during cross-examination was consistent with no chemical having been in the house. Dr. Cullen did not believe that Ms. Tingley had been exposed to a toxin or that she suffered from Multiple Chemical Sensitivities. He did not deny that she suffered from certain symptoms; his assessment, however, was that the probable

explanation was that her symptoms were related to the stress connected to the break-in.

Todd and Kelli Smith's Health Status in 1994 and 1995

[239] The defendants maintain that in view of Dr. Fox's evidence that Todd Smith and Kelli Smith were healthy as recently as June 1995 (Todd) and October 1995 (Kelli), his opinion that they developed Multiple Chemical Sensitivities as a result of an exposure to a toxin in their home is not sustainable.

[240] Dr. Fox first assessed Todd Smith and Kelli Smith in December 1994, some three years after the alleged exposure and about 14 months after they moved out of the house. He concluded that neither child had Multiple Chemical Sensitivity at that time, and that they were both healthy. He said that at that time neither child was outside the normal range of sensitivity. Mr. Smith did not complain of reactions to any chemicals, inhalants or foods. He reported that his mother and Margaret Burton smoked around him and this did not bother him. He also reported having difficulty coping with his father's death and difficulty sleeping. Ms. Smith reported no restrictions on her diet and no food sensitivities and no problems with memory or concentration. Her main complaint was wheezing, which had started in October or November 1994. Dr. Fox did not believe that this reactive airway disease was related to an exposure to chemicals or toxins in the house. His conclusion that neither child had MCS was reconfirmed when he assessed them again on June 19, 1995 (Todd Smith) and October 6, 1995 (Kelli Smith). He concluded at that time that both Todd Smith and Kelli Smith were healthy teenagers, neither of whom suffered from or needed treatment for MCS.

[241] The defendants rely on Dr. Cullen’s view that environmental health effects typically arise during or soon after the exposure, not as a delayed or latent consequence of exposure. Thus the defendants submit that even if Todd and Kelli Smith did develop Multiple Chemical Sensitivity, it was not related to an exposure in the Smith home. Their primary position, however, is that the change in the two children's health that Dr. Fox perceived did not actually occur. They say Dr. Fox did not have an accurate understanding of each plaintiff's health as it was prior to the alleged exposure, or after. His conclusions, they say, were based on inaccurate and misleading information provided by the plaintiffs, and his opinions should therefore be rejected.

[242] The defendants say that Dr. Fox accepted the plaintiffs' accounts (and particularly that of Ms. Tingley) of toxins or chemicals being spread in their house, and of changes in their health contemporaneous in time to the alleged exposure. Dr. Fox agreed on cross-examination that it was critical to his acceptance of their reports of a chemical or toxin being spread in their home that each of them experienced a change in their health that coincided with that event. He referred specifically to Todd Smith's IWK ER visit and to Ms. Tingley having effects "within the time of the initial exposure," as well as temporary fatigue and reactivity reported by Kelli Smith. Dr. Fox relied on the plaintiffs to provide him with their medical histories. He did not review prior medical records. All his information about the alleged exposure came from the plaintiffs, and primarily from Ms. Tingley. He acknowledged on cross-examination that if information provided by one of the plaintiffs was inaccurate, this could change his opinions.

[243] Dr. Fox testified that Kelli Smith developed fatigue after the alleged exposure. His assumption that this fatigue developed within a month or two of exposure was based on the presentation of her history. She did not report to him that she had problems in Grade 9 although she said she was tired and having trouble sleeping for her entire Grade 10 year. He acknowledged that if her fatigue did not start until January 1993, this situation would be different from his prior understanding, and there could have been other intervening causes.

[244] Dr. Fox was unaware that Kelli Smith had made the Principal's List for high achievement in the first term of Grade 10, and agreed that this did not suggest she was having problems to that point. He had never seen the March 19, 1993, note in Dr. Greg Roy's chart indicating "Fatigue, fever, sore throat, on + off x two months" and indicating that Ms. Smith sought a referral to a psychiatrist due to family issues. Nor had he seen a May 17, 1993, note that alluded to sleeping difficulties and claims by her mother that her father physically abused her and that a friend of hers had "died under ice" that winter. Dr. Fox was also unaware that Ms. Smith had testified against her father in court, and that he was allegedly abusing and stalking her. He agreed that such issues could lead to sleep and fatigue issues. He did not know that her problems started in the second half of Grade 10. He testified that if he had the foregoing information he would have made additional inquiries. He said the circumstances were consistent with her problems being caused by something other than chemicals in her home.

[245] Kelli Smith testified that for some time, until she was in University, she was in denial, denying she was sick from any exposure. She, and her mother, took exception to the reference in Dr. Roy's notes to a friend having "died under ice". Kelli said he was a classmate, rather than a friend. She insisted, notwithstanding her marks only appeared to decline in the second term of Grade 10, that she experienced effects dating back to Grade 9. She also said her difficulties with her father and with her parent's divorce did not cause her undue stress or difficulty.

[246] Dr. Fox assessed Kelli Smith a third time on September 10, 1996. He testified that at this point he believed that she had developed hypersensitivity to chemicals. She reported a seizure-like event that occurred after sex with her boyfriend, as well as certain food sensitivities. She told him that she was reacting to mould in the house she was living in on Pelzant St. Dr. Fox testified that exposure to mould can cause food sensitivities, chronic fatigue, chronic pain, severe allergies, nasal stuffiness, eye irritation, chest problems, coughing, brain fog and chronic illness. While he knew that the plaintiffs moved out of the Pelzant Street house due to mould, he was not aware that a Department of Housing inspection had declared the house unfit due to mould.

[247] The defendants submit that Dr. Fox testified that the information he received at trial regarding Kelli Smith's health was different from the account he received from her directly, and that the information presented at trial was not consistent with a chemical exposure in the house.

[248] Mr. Smith agreed that he has a lifelong history of asthma, which he thought was under control in September 1991. He said he did not remember being on medication at that time, and did not believe he had had a flare-up for over a year. However, Dr. Hughes reported to Dr. Martin in July 1989 that Mr. Smith had fairly regular symptoms of cough, dyspnea and wheezing, triggered by upper respiratory tract infections, cold weather, hot weather, excessive activity and being over-tired. Mr. Smith agreed this was the state of his asthma in 1989. He said both his parents smoked and he believed smoking aggravated his asthma. Based on a report from Dr. Hughes, to Dr. Roy, dated October 24, 1990, he acknowledged that he was still on medication as of October, 1990. He agreed that in 1991 he was using a mask regularly for his asthma and was having asthma flare-ups.

[249] Mr. Smith also agreed that he was treated for upper respiratory infections frequently as a child. He saw Dr. Roy on September 19, 1991, the day before the

break-in, and the notes state, "For a checkup. Was off school yesterday and today. Sore, headaches, sore throat, sneezing last night. Feels like hit by a bus." Mr. Smith said it seemed like he had been sick with a cold for a few days leading up to September 19, 1991, and agreed a cold would often cause his asthma to act up.

[250] Medical records also indicate that Mr. Smith had experienced chest pains and tachycardia, which can be attributed to stress connected with the family fighting. He agreed that he began to feel better when the family problems were addressed. He did not recall being diagnosed with anxiety in 1994, but said it was a bad year; his father had died on August 30, 1993, and he moved in with his mother, about two months before they moved out of the house.

[251] Mr. Smith saw Dr. Zinman in October 1991. In her report to Dr. Roy, dated October 8, 1991, Dr. Zinman stated "I believe the asthma exacerbation is related to the toxic exposure of the spray." Mr. Smith said he did not recall if he told Dr. Zinman about the previous flare-ups, or about seeing Dr. Roy on September 19, 1991. In a letter dated November 15, 1991, Dr. Zinman suggested that fighting by his parents contributed to Mr. Smith's asthma. He agreed that Dr. Zinman had written that as of November 1991, "Todd's asthma still is uncontrolled." He apparently saw her again on December 19, 1991. Her report of this visit did not refer to itchiness, burning eyes, or headaches. She stated that his ears, nose and throat were unremarkable, and he did not have a sore throat. Her impression, she wrote, was that his asthma was now well-controlled. He agreed that by December 1991 his asthma was improved and he did not have any lung problems.

[252] Mr. Smith saw Dr. Zinman again in February, 1992. He agreed that at that time he did not have a sore throat, his nose was not stuffed up and his eyes and ears were fine, he was not reporting headaches, his chest appeared clear, and his asthma flare-up was gone. He agreed that his medical records suggest that he was doing better in the summer of 1992 than he had been in the summer of 1990, and better in the summer of 1992 than in 1989, in regards to his asthma. In agreeing that between February 1992 and September 1992 he was fairly healthy, Mr. Smith added that most of the time he was at his father's home. He said his health issues occurred when he was at his mother's. He agreed that between 1992 and 1993, he was healthier than he had been prior to 1991.

[253] Mr. Smith said he did not like the apartment on Cole Harbour Road. It was a two-bedroom apartment. He smelled his mother and Ms. Burton's off gassing, and there were ambient smells from the other apartments as well.

[254] Counsel referred Mr. Smith to a letter dated January 24, 1995 from Dr. Fox to Dr. Elliott, in which Dr. Fox noted that Mr. Smith did not report reactions to chemicals, inhalants or foods, and that he indicated that his mother's and Ms. Burton's smoking did not bother him. Mr. Smith agreed that as of January 1995 he was not having reactions to chemicals, inhalants or food of which he was aware.

[255] Dr. Fox noted that Todd had said that the only time he had burning, dry eyes was when he returned to the apartment. Dr. Fox wrote that he believed that Mr. Smith was "chemically sensitive in that he gets burning eyes and reacts to the presence of his mother and Micki, and his sister Kelli. However, he does not have other features of chemical sensitivity". Mr. Smith said the smell was only from Ms. Tingley and Ms. Burton, not his sister. The report indicated no significant respiratory complaints and no cardiovascular complaints. The report did note that Todd had said his feet turned bright red in the bathtub which Dr. Fox described as "a new phenomena within the last few years." Mr. Smith agreed that as of December 1994, apart from the smells, he was generally healthy.

[256] As of September 1991 Ms. Tingley, Kim Tingley and Ms. Burton all smoked. Kelli Smith took up smoking at one point, but Mr. Smith said he was not sure whether it was while they were at Silestria Drive or in Cole Harbour or Pelzant Street. Only his own room was off limits for smoking. He did not smoke, and he indicated that the smoke bothered his asthma.

[257] Mr. Smith agreed that he was not getting along with his mother while they were living in Cole Harbour and later on Pelzant Street. On being referred to a referral note from Dr. Alward, his family doctor, to Dr. Allison, which indicated that he felt depressed and had insomnia, he said he did not recall having depression.

[258] At the trial, Mr. Smith said he did not know whether his mother ever said that she thought his father had spread the chemicals. On his discovery on October 28, 1996, he said his mother had talked to him about her belief that his father had done it. He agreed that as of October 1996 he did recall that his mother had expressed this view to him. He said he never believed his father had done it. He

did not believe his father would harm his children nor their mother, either. Mr. Smith agreed that his mother had told him about the death threat. He believed she told him before the break-in, although he was not certain.

[259] Mr. Smith did not believe that he had food allergies or difficulty paying attention in school in 1993 and 1994, and did not recall having difficulty keeping up with friends' activity levels. He believed that he was sick in the spring of 1995, possibly with mono, and believed he was hospitalized.

[260] Mr. Smith agreed that in January 1995, Dr. Fox found him to be healthy. He said he had mono later that year, but did not attribute it to environmental illness. Dr. Fox began the IV treatments after he had mono, and Mr. Smith said he did not do well with them, finding that he was ill for several days after a treatment, and had suffered at least one seizure.

[261] The family moved to Pelzant Street in January, 1996. Mr. Smith said they did not know there was a mould at Pelzant Street when they moved in. He said it was not discovered until the fall. They taped over registers and sealed the basement door. He agreed that when he moved out he started to feel better. He said he did not recall how long they were living in the home before they discovered the mould.

[262] Although Mr. Smith disagreed with the order of events set out in a letter from Dr. Earle Reid to Dr. Patricia Beresford, dated January 23, 2008, he acknowledged that at this time he had Bell's palsy and was having headaches. He said it probably did not occur to him to tell them about a blow to the head he received in 1993, when he suffered a concussion in an assault.

[263] Mr. Smith said that in January 2000 his only complaint was light sensitivity, while remaining housebound. As of April 2005 he was not having stomach problems and his lungs were fine.

[264] Mr. Smith said he tries to avoid exposures that affect him negatively. He agreed that in the weeks before the trial he had been at parties with friends. He agreed that he had no physical difficulty from alcohol, and does testing at work, as part of his job at the Nova Scotia Liquor Commission. He said he had no difficulty in attending movie theaters. He said he had not had a significant reaction from an environmental issue in quite a while.

Mould in the Pelzant Street House and the Plaintiffs' Health

[265] The timing of the plaintiffs' knowledge that there was mould at Pelzant Street is contentious. Patricia Tingley stated on cross-examination that they moved to Pelzant Street in January 1996, and left in December 1997. She said there was only a mould problem for the last six months they lived at Pelzant Street. However, Kelli Smith reported to Dr. Fox in September 1996 that she was living in a house with mould. As such, the defendants submit, the plaintiffs knew of the mould problem by that time. The plaintiffs take issue with the date of the visit by Ms. Smith to Dr. Fox, saying it was the next year and within 6 months of the family leaving Pelzant Street. Dr. Fox referred, in a letter dated October 22, 1997, to Ms. Tingley saying that there was a "severe mould problem" in the house. He testified that he knew there was mould at Pelzant Street for at least a year, and that at some point between September 1996 and October 1997 he concluded that they should move out of the house.

[266] On discovery Ms. Tingley stated that she took steps to prevent mould from coming up from the basement soon after they moved into the Pelzant Street house, which was in January 1996. The defendants submit that Ms. Tingley's discovery evidence is consistent with Kelli Smith's report to Dr. Fox in September 1996 that there was a mould problem at Pelzant Street of which they were aware earlier than Ms. Tingley suggested at trial. The defendants submit that Ms. Tingley attempted to downplay the mould issue at Pelzant Street in her evidence. Ms. Tingley denied that the housing officials who inspected the house told her it was not suitable for living in because of mould. On discovery, however, she recounted that she was told that it was "not suitable for basically healthy people, but environmental people, it was really bad."

[267] Ms. Tingley underwent therapy at the Environmental Clinic, including therapeutic touching and IV treatments. Ms. Tingley reported she found the IV treatments helpful. In a letter to Dr. Elliottt dated dated June 19, 1995, Dr. Fox wrote that she was responding to treatments and had more energy, and he felt the IVs were having some effect. In testifying, he did not recall that the IV treatments were beneficial.

[268] Ms. Tingley testified that her health had two bad periods, one of which was while living in the Pelzant Street house. After moving into that house, she said,

she lost weight rapidly and could not take regular medication. By the spring of 1996, after four months at Pelzant Street, she said she hit "rock bottom" and became "supersensitive." The other bad period was while she was receiving IV treatment at the Environmental Clinic. Dr. Fox agreed at trial that the IV therapy did not help the Plaintiffs and in fact caused severe symptoms and reactions. Again, whether the IV therapy was helpful is a matter of contention. Ms. Tingley insisted it was helpful. Dr. Beresford introduced a letter from the files of Dr. Elliottt written by Dr. Fox containing the opinion that the IV therapies were helpful. However, what is clear is that Ms. Tingley and Mr. Burton had reactions, and apparently severe reactions, during the course of their IV therapies.

[269] Dr. Fox testified that he had no record of Todd Smith reacting to mould. He did not know about the attempts to seal off Todd Smith's bedroom at the Pelzant Street house (by sealing vents and closing radiators) in order to limit his exposure to mould. He testified that if he had known of such a situation, his advice would have been to find and remove the mould. He said the mould would have been detrimental to the health of the occupants from their first exposure to it.

[270] Dr. Fox testified that, given that Kelli Smith had moved out of the Silestria Drive house in October 1993 and appeared to be healthy as late as October 1995, the hypersensitivity she reported in September 1996 could have been caused by mould

[271] As to Todd Smith's health, Dr. Fox understood from the plaintiffs that his asthma had been under control for some time by the time before the break-in, and that he did not need medication. He did not review Mr. Smith's medical records, but relied on the accuracy of the information provided by the patient. However, an emergency room record for May 16, 1991, indicated that Mr. Smith received steroids to treat asthma at that time. Nor did Dr. Fox know about consultations with a Paediatric Pulmonary Specialist in June 1991 to discuss an asthma management program. The family doctor's records also indicate that Todd Smith was taking asthma medication on September 19, 1991. As such, Dr. Fox acknowledged that Mr. Smith had apparently not outgrown the asthma and that he required medication to control it.

[272] On the basis of the new (to him) records, Dr. Fox testified that there was apparently no change in Todd Smith's health after the break-in, contrary to the history he received at the time he was treating the plaintiffs. Nor did his

understanding of the events at the IWK emergency room coincide with the information in the hospital records, which he saw for the first time at trial. His understanding was that the emergency room visit was prompted by Todd Smith having breathing problems. He did not recall being told of the foot irritation, or of Mr. Smith "shedding skin" in the shower, prior to 2007. He agreed that if Mr. Smith was as sick as he had been told, it would be reasonable for this to be reflected in the ER record. However, he said, the IWK record does not suggest a clinical impression that there was an exposure; rather, it suggests no concerns for Todd Smith's health. Dr. Fox agreed that Dr. Greg Roy's chart note of September 19, 1991 - referring to headaches, sore throat and sneezing - suggested that there was a respiratory infection before the break-in. He testified that, based on these records, Mr. Smith did not develop an upper respiratory tract infection at the time of the exposure; rather, he already had one.

Margaret Burton

[273] Dr. Fox testified that when he assessed Margaret Burton for the first time on November 17, 1994, he was not aware that she suffered from fibromyalgia before the alleged chemical exposure. He understood that she began to have sore joints in September, 1992, which she attributed to the alleged toxic exposure. He did not know of her prior history with a fatigue-like syndrome, fibromyalgia and fibrositis. On being shown a report by Dr. Elizabeth Mann, who was one of the doctors Ms. Burton saw before November 1991, he stated that it appeared that her description of burning discomfort throughout her body pre-dated the exposure, as did her periodic experience of symptoms similar to upper respiratory tract infections, swollen glands, fatigue, headache and problems with concentration. He was not aware that she had given up a job due to health issues before the alleged exposure, or that she had intolerances to certain materials before September 1991. He agreed that Dr. Mann's letter indicated that there was no change in Ms. Burton's health following the alleged exposure.

[274] Dr. Fox also testified that he had not been aware at the time of the consultation that Ms. Burton had been assessed by a physiatrist, Dr. Douglas Watt, on September 20, 1991. Dr. Watt's notes indicate that Ms. Burton reported that she had fibrositis, poor sleep, pain, a burning sensation and lumps under her skin, Dr. Fox testified that Ms. Burton told him that these symptoms were caused by the alleged exposure in the house.

[275] On a review of the records presented to him at trial, Dr. Fox formed the view that Ms. Burton suffered from Chronic Fatigue Syndrome and fibromyalgia and was hypersensitive to medications, metals and fabrics before the alleged exposure. He also agreed that it was possible that she had Multiple Chemical Sensitivity before the alleged exposure.

[276] Dr. Jean Gray believed Ms. Burton's problems were the result of a neurological problem, not a chemical exposure. Dr. Cullen's view was that Ms. Burton had suffered, since around the age of 30, from "a somatoform type disorder in which severe medical symptoms occur and recur which defy medical diagnosis" and which have no identifiable biologic basis. He said it was apparent from the medical records that she had suffered from fibromyalgia since the late 1980's, and possibly Chronic Fatigue Syndrome. He did not believe she suffered from MCS, though he said a high fraction of people with fibromyalgia and chronic fatigue are more sensitive to chemicals than average.

THE ISSUE OF CREDIBILITY

Patricia Tingley

[277] It is clear that Ms. Tingley was the driving force behind the plaintiffs' claim. She initiated the first of the two actions, and was involved in virtually every interaction with the police, Wellington, Larry Hay, and with the plaintiffs' various counsel.

[278] Counsel for the plaintiffs assert that there are various inconsistencies and contradictions in the evidence of many of the witnesses, including Mr. Hay and Ms. Strong. He effectively suggests the Court should regard inconsistencies and contradictions by the plaintiffs as to be expected, given the long period that elapsed between the events and their testimony in court. This view ignores the nature of the inconsistencies and contradictions, and the source of the contrary evidence, whether it be the witnesses' own prior statement or record, or notes or records by others, including nurses, doctors and RCMP witnesses.

[279] The defendants say Ms. Tingley's evidence should be rejected as not credible and not truthful. They offer several examples. For instance, Ms. Tingley testified about a Small Claims proceeding initiated by Brian James of James Proper Care, claiming the cost of painting done for Ms. Tingley, additional to painting

done under contract for Wellington. She said she attended Court twice, wtih Mr. James not appearing on either occasion, and that the case was dismissed. Mr. James testified to the contrary. He said when they attended they met with a Court official, and Ms. Tingley told him that she was "going to war with Wellington", that she was "taking no prisoners" and that she was having "testing done in Texas and Massachusetts." Mr. James testified he would not have picked those places out of his head. While working on another contract for Wellington, he met Mr. Hay and told him of his encounter with Ms. Tingley, which he subsequently described in a letter he sent to Mr. Hay, at his request.

[280] Clearly Mr. James had a potential dispute with Ms. Tingley. She had hired him to do some painting and had not paid him. By the time of the encounter, and the subsequent letter, he would have been aware Ms. Tingley had complained about the work he had done for Wellington in her house. He was also involved in ongoing contractual arrangements with Wellington. Nevertheless, nothing, apart from Ms. Tingley's denial and contrary version of what occurred at Small Claims Court, was offered in response to Mr. James' account. No records were offered to explain how, and under what circumstances, the claim was withdrawn. Mr. James said that in view of Ms. Tingley's attitude, it was not worth pressing, while Ms. Tingley said it was dismissed because of Mr. James' failure to appear.

[281] Another instance of alleged untruthfulness in Ms. Tingley's evidence relates to Dr. Amares Chatt, the Dalhousie chemistry professor who she asked to carry out testing. Ms. Tingley's evidence at discovery as to whether she told Mr. Hay of the testing by Dr. Chatt is curious. At one point on discovery, in response to a question as to why she did not tell Mr. Hay about the testing by Dr. Chatt, she said she had no reason to tell him because he had not taken her case seriously. Then, on being asked if she did not tell him because she was angry, she responded:

> No. It's the old thought. If you don't ask the right questions, you don't get the right answers. If he had asked me, I would have told him. I obviously forgot. Maybe I did tell him. I didn't say that I never told him that. I've never once said I did not tell him that.
>
> [....]
>
> I've never - no, no, I have never tried to hide this Dalhousie professor to (sic) anyone. You have known about this professor for a long time.
>
> [....]

> I'm saying I don't know if I told Larry Hay or not, but I'd never hide the fact where (sic) you would not have found this gentleman

[282] Mr. Hay testified Ms. Tingley never told him she took items to Dr. Chatt for testing, nor did she convey the results to him. Defence counsel asserts that Ms. Tingley was impeached, because in an affidavit she provided on the defendants' application to amend their defence, she stated:

> I note that the Defendants wish to amend their Defence. They represent that they were not aware of the testing that I had done by Dr. Chatt of Dalhousie University. This is not accurate as I had advised the Defendant Larry Hay shortly after I had the test done of this and he has been aware since that time.

[283] The affidavit was sworn on October 27, 2000, a little more than a year after the discovery examination on September 16-17, 1999. The defendants maintain that Ms. Tingley did not tell Mr. Hay about Dr. Chatt and that she lied in the affidavit.

[284] In another instance of an alleged lack of credibility, the defendants refer to Ms. Tingley's evidence, repeated a number of times, that there was no custody battle between her and her ex-husband, Philip Smith. The defendants say her evidence on discovery was otherwise, to the effect that there was a "custody battle raging between Ms. Tingley and her ex-husband". They cite several statements on discovery, such as her comment on September 14, 1999, that "Phil and I were in a very nasty...custody battle then over our daughter. Similar remarks appear in RCMP notes for October 11, 1991. In her evidence she said there were times it was difficult and times it was less so. She was also referred to her use of the phrase "constant battlefield" in discovery.

[285] The defendants also challenge the veracity of a statement by Ms. Tingley in an affidavit filed on an application by the defendants to compel the plaintiffs to submit to medical examinations by Dr. Cullen. Ms. Tingley outlined a number of alleged errors by Dr. Cullen in an earlier report, including his reference to "a custody battle raging", which she said was not true. The same affidavit made reference to Dr. Cullen talking about a friend of Kelli Smith dying in an ice related accident. In her affidavit, Ms. Tingley said this statement was not accurate, as "my daughter did not even know the boy in question," although he went to her school. The defendants point out that the death of a friend under ice in 1993 was a reason given to Dr. Roy on May 17, 1993, for Kelli Smith not being able to sleep. The defendants say Kelli Smith acknowledged in her evidence that she knew the

person, “but tried to downplay the significance of it by stating she was upset for a short time only about it”. They submit that Ms. Tingley’s assertion in the affidavit that Kelly did not know the boy who drowned was evidence that she will lie and say whatever is necessary to win.

[286] As another example of the alleged untrustworthiness of Ms. Tingley’s evidence, the defendants refer to the evidence of Cst. Ken Turner concerning a conversation with Ms. Tingley following the second break and enter. Cst. Turner testified that Ms. Tingley said it was probably her brother, Kim Tingley, who broke in, because he still had belongings in the house. Cst. Turner’s notes, dated November 28, 1991, state that Ms. Tingley said “it probably was her brother Kim who broke into the house....Mrs. Tingley advised that Kim is a compulsive liar and unless you have proof don’t go to see him because he is cocky.” At trial, Ms. Tingley denied that she said any of this to Cst. Turner. In addition, the notes of Cst. Rice respecting a conversation with Ms. Tingley on September 29, 1991, stated that she said “she does not trust her brother...He reported the break. Tingley lives in the basement and nothing of his was touched.”

[287] The defendants also refer to the evidence of Mr. Hay that, in a telephone conversation on October 2, 1991, Ms. Tingley told him the R.C.M.P. had taken a clothing sample from her house which had a white powder on it. His file note of the conversation states, “RCMP took clothing sample - white powder on it.” However, the two officers who were at the house on October 2, 1991, Cst. Emberley and Cst. Turner, stated that, while they saw a powder or substance on a piece of clothing, they did not seize anything for testing.

[288] The defendants also suggest Ms. Tingley lied when she said she remained outside the house while the videotape of the interior of the house was made on May 11, 1994. Ms. Tingley testified that she stayed on the porch while the video was made. Todd Smith stated that certain comments heard on the video appeared to be his mother’s voice. I am not prepared to draw such a conclusion in this instance; this point is not significant to any issues in the proceeding, and I am not prepared to find that Ms. Tingley was lying on this point.

[289] The defendants assert that Ms. Tingley “attempted to mislead the Court on the nature and extent of Dr. McGlone’s advice”, without identifying the specific evidence in question, or how it misrepresented the “nature and extent of Dr. McGlone’s advice.” There are various examples where Ms. Tingley’s recital of

advice she says she received is not borne out by the evidence of the person who purportedly advised her, or by their records. An example is the notes made by the staff of the I.W.K. compared to what Ms. Tingley says she was told, and what was done, when she, Todd and Kelli attended on the evening of September 30, 1991.

[290] Disturbing, in the context of what might have occurred, is the suggestion that Ms. Tingley considered or suggested having the two children, Kelli and Todd, sterilized. Ms. Tingley denied this, and denied that she consulted Dr. Elliottt respecting sterilization for Kelli, or telling Dr. Graves, who appears to have been a fertility specialist, that she had received advice to have Kelli sterilized. Dr. Elliottt is deceased, but his handwritten notes to Dr. Graves dated April 3, 1995, state that the home had been contaminated, that "[t]his teenager is sexually active" and her mother "insists that she be sterilized and I suggest this is over dramatic...." Dr. Graves wrote to Dr. Elliott on April 3, 1995, stating that Ms. Tingley and Kelli had been in to discuss "advice that the mother has been given to consider having her children sterilized because they have been exposed to toxic chemicals." There were also references to the suggestion of sterilization in Dr. Barbara Fox's file, including the comment that "Dr. Deagle said our DNA had altered because of poisoning." (Dr. Barbara Fox was a psychologist). Ms. Tingley denied telling Dr. Graves that she had been advised to have Kelli sterilized, and denied defence counsel's suggestion to her that Dr. Deagle had suggested that Kelli should be sterilized.

[291] The defendants also suggest there is inconsistency in Ms. Tingley's evidence about her medical history when compared to the medical records on file. She testified that from the time she entered the house on September 28 until she attended at the I.W.K. with Todd and Kelli, she experienced burning eyes, burning throat, intense thirst, a taste in her mouth, tiredness and headaches. The defendants say she did not report any of these symptoms at the I.W.K. On a discovery in another proceeding on August 15, 1995, Ms. Tingley acknowledged that, although she was experiencing burning eyes and a bad taste in her mouth, she told IWK staff that "basically I was fine." She added that when they asked if she had any symptoms, she said, "no, I did not, all I had was a little taste in my throat, burning eyes, nothing dramatic." When asked if she told Dr. Grover about her burning eyes and burning skin, she answered that she was not sure if it was Dr. Grover, and that "Dr. Grover wasn't interested in me, he was interested in my two children." When pressed further, she said, "[a]ll I remember telling Dr. Grover was that I had a mild headache."

[292] Ms. Tingley testified that the headache might have been caused by the fact she was up all night going through the house. The defendants say that given the emergency Ms. Tingley says she and her family were experiencing, "it is inconceivable that she would go to a hospital emergency room and not discuss the symptoms she had allegedly suffered". The defendants note that on cross-examination, Ms. Tingley said that prior to October 13, 1991 she was "sick as a dog" and experienced headaches, earaches, red ears, diarrhea, cramps, thirst, burning throat, burning eyes, a taste in her mouth, chills, flushing, and was not working. Ms. Tingley said she communicated this information to Mr. Hay by October 13, 1991. She reported similar symptoms to Canada Life during an application for Disability Insurance dated October 17, 1991. The defendants submit that this evidence "flies directly in the face" of her discovery evidence. She also said on discovery that she told a nurse from Canada Life that there had been a break in, that her son had gotten sick and that he was being treated at the IWK. She did not mention being sick herself. The defendants' position is that Ms. Tingley's health was as she described to Canada Life.

[293] The defendants observe that between September 28 and December 31, 1991, Ms. Tingley only saw one doctor, her family doctor, Dr. Greg Roy, on October 2. They argue that given the severity of the symptoms she says she had at that time, it is inconceivable that she would not have sought medical attention. The defendants say that Ms. Tingley not being sick at that time is consistent with Kim Tingley's evidence that he did not remember her being sick, and Paula Robbins' evidence that she did not recall any of the family being sick at that time. Further, Mr. Hay denied that Ms. Tingley told him about the many symptoms she describes. He said the only symptoms he knew of were the rash she apparently got from a shirt and the skin burning. He also said that when he and Donna Strong attended with Ms. Tingley on November 21, 1991, she did not mention any health issues that she, Todd or Kelli were experiencing.

[294] An already noted example of an instance where Ms. Tingley testified to a health effect, then said her previous statement was incorrect, only to revert to her original position at trial, concerned the length of time she experienced diarrhea after visiting the IWK. Dr. Fox understood from Ms. Tingley that it lasted two weeks. At trial, Ms. Tingley described the diarrhea as lasting for two weeks. On cross-examination, she was referred to her statement on discovery that the diarrhea lasted two or three days. In the same discovery examination she was referred to a

report by Dr. Jennifer Klotz in the Canada Life proceeding in which she was reported to have said that she had two weeks of "green oily diarrhea along with severe headaches, breathing problems, and general weakness." Her response on the discovery was, "[t]wo days diarrhea. Headaches had passed by then." It appears that on September 17, 1991 Ms. Tingley was prescribed the antibiotic Amoxil, a side effect of which is diarrhea, according to both Dr. Fox and Dr. Cullen.

[295] The defendants also take note of inconsistencies as to whether Ms. Tingley lost weight during this period. Dr. Fox said he understood she had lost 20 lbs. initially. However, Ms. Tingley's Canada Life application indicated that she had gained weight. Ms. Tingley said on cross-examination that she had periods of weight loss, in late 1993 and in 1995.

[296] Another suggested inconsistency in Ms. Tingley's evidence arises from Dr. Fox's understanding that she had bladder infections and urinary symptoms within a few weeks of going into the house, which he agreed was inconsistent with the MSI records. He also agreed that it would have been relevant that Dr. Greg Roy's records indicated that Ms. Tingley had experienced urinary tract infections before September 1991. Ms. Tingley said she did not think it was important to tell Dr. Fox about her history of urinary tract infections. Dr. Fox, on the other hand, said the information was important in determining whether there had been a significant change in her health. He had also not received the reports of Dr. Lawen, the urologist, who testified that he found nothing to link Ms. Tingley's complaints to a toxic exposure.

[297] Ms. Tingley also testified that Dr. Klotz, a dermatologist, was wrong when she stated in her report of August 22, 1994, that Ms. Tingley had said her skin had been grey and peeling, and that she had breathing problems after moving out of the house. Dr. Klotz also reported that Ms. Tingley said her house was labelled "contaminated" and was "sealed off". Ms. Tingley denied telling this to Dr. Klotz, saying it had only been her opinion that the house was contaminated. Also in Dr. Klotz's report is the statement that Ms. Tingley's neighbours had symptoms as a result of the house being contaminated. Ms. Tingley denied that she told this to Dr. Klotz.

[298] Dr. Bruce Elliott reported, on October 29, 1994, that Ms. Tingley initially noticed a bitter taste, and that "when she showered the next day she exfoliated

'grey' skin and a carpet - burn like rash had developed on her back." On cross-examination Ms. Tingley said that Dr. Elliott made mistakes. When his report was put to her on discovery, Ms. Tingley said "he got things all screwed up, as Dr. Klotz did and as Jean Gray. But Jean Gray probably made the least amount of mistakes in all the medicals I've had...." She said she had not exfoliated grey skin, saying that was a reference to her son.

[299] Dr. Fox had not been aware that Ms. Tingley was seen by Dr. C.J. Gallant, a dermatologist, on March 23, 1992. He said that the skin problems she had attributed to the alleged exposure when speaking to Dr. Gallant were different from what she later described to him in 1994. He acknowledged that Dr. Gallant did not associate the skin conditions with a chemical in the home. Dr. Fox said he would defer to the opinion of Dr. Gallant, the dermatologist.

[300] The defendants additionally allege inconsistency in Ms. Tingley's description of her ability to work after the alleged exposure. Ms. Tingley testified that she worked until June 1994, and her business grew. In early 1994 she carried out a marketing campaign, and was looking for new employees. She said she was working ten to twelve hours per day in early 1994. Dr. Fox, however, said he was surprised to learn she had continued to work at this level until June 1994, and said he would not have expected a person presenting as Ms. Tingley did to be able to do so. Dr. Cullen also stated this information changed his impression of the "functional severity of her symtomology" between 1992 and 1994. He said this level of activity, by a person who was "ostensibly a severely ill woman unable to tolerate all environmental exposures except for tobacco" was "generally not consistent with that level of social functioning."

[301] Another suggested inconsistency arises from the plaintiffs' apparent ability to cope with cigarette smoke. Ms. Tingley, Ms. Burton and Ms. Smith, all smoked at one time or another. In the evidence it appears that at times Ms. Tingley and Ms. Burton were smoking about two packs of cigarettes each per week. Ms. Smith apparently started smoking in 1993, and continued to smoke until 2000. Dr. Cullen took the view that the ability to tolerate cigarette smoke would exclude a diagnosis of multiple chemical sensitivity in most instances, and that if the person actually smoked he would be incredulous, unless the person reported feeling sick when they smoked.

[302] Another discrepancy arises in reference to Constable Rice visiting the home and observing a substance on some of Ms. Tingley's clothing. She said Constable Rice said it looked like nicotine or light burn. She acknowledged being present when Constable Rice was discovered in September 1999 and his saying that Ms. Tingley had said to him there was a yellow substance that appeared similar to nicotine or light burn, but that he couldn't see any marks. He said he saw no evidence of any substance, nor could he smell any substance. He said that it was Ms. Tingley who said she could smell something.

[303] At trial, Ms. Tingley stated that when she returned from Sydney, following the break in, she did not smell anything on entering her house, but within five minutes of entering, she experienced burning eyes, soreness in the back of her throat and intense thirst. She said the children reported no symptoms. She was referred to her discovery in January 1997 where she said that the children did not smell anything. She had also said that Todd suggested that RCMP fingerprinting material may have been bothering her eyes. At trial, she agreed that she had said this on discovery, but said graphite does not give her any of the three symptoms she identified.

[304] On cross-examination Ms. Tingley agreed that prior to September 1991, she probably had burning of her eyes, caused by oil paint. She was not sure if she had previously experienced throat soreness, but said she "certainly" did not have the thirst. She was then referred to her discovery evidence, where she stated that as a child she experienced these symptoms when her father painted. Her discovery evidence also indicated that she had experienced these symptoms when her husband had painted their house, although she testified that she did not recall having these symptoms when she was married. On being asked if there were other things, besides paint, that gave her the same symptoms, Ms. Tingley said she did not recall. She said she did not recall saying at her 1997 discovery that she had the same symptoms when she was in hospital as a child, triggered by floor cleaners and medications. She said she did not recall experiencing the same type of thirst when she was in hospital. She said she could only remember having burning eyes from the cleaner used by the janitor for cleaning the floors when she was in school. She said she did not give accurate information on discovery. She said she might not have understood the questions. She maintained that before September 19, 1991 she had not experienced these symptoms on many occasions. She stated she had burning of her eyes on some occasions, and sore throat on some occasions but

never the thirst. Ms. Tingley agreed at trial that she did not tell Dr. Fox that she had experienced these symptoms prior to September, 1991.

[305] Ms. Tingley testified that on first entering the house she experienced burning eyes, burning in the back of her throat, intense thirst and a taste in the back of her tongue. She said she could not recall whether these symptoms persisted until she and the children went to the IWK. She agreed that she likely did not raise these symptoms with Dr. Grover at the IWK, but said this does not mean she did not have them. On discovery, however, she said she would have left the IWK and gone to the Victoria General Hospital if she had been ill. After being referred to this discovery evidence, she maintained that her only symptom at that time was a headache, which she attributed to being up all night.

[306] Ms. Tingley said she was "physically sick and fragile" when she was discovered on August 15, 1995, by John Rogers in the lawsuit with Canada Life. She could not say whether she informed counsel of this. As to whether her memory was better in August 1995 than when testifying in court, she said it would depend on whether she was tired and reactive at the time. She was discovered again in 1997, this time in the residence on Pelzant Street, Dartmouth. This was done in order to provide her with a safer environment and to assist her cognitive recall. She said, however, that she was still sick and frail at that time, but not as impaired as during the 1995 discovery. Later she commented that at the 1997 discovery she was not the "sharpest knife in the drawer".

[307] Ms. Tingley said Todd's feet were still red and swollen while they were in the car enroute to the IWK. She did not challenge the notes in the IWK records that indicated nothing abnormal about Todd. She said on discovery in January 1997 that she brought the socks Todd was wearing; at trial she said this was incorrect, and that the only piece of clothing she took to the ER was the sweater. She said the nurse's notes were incorrect in saying that "no obvious irritation" was noted. She also stated on discovery that Todd did not experience a burning sensation in the shower at the IWK. At trial she said she was not sure. The nurse's notes state, at 23:30, "shower completed. No skin irritation felt." Ms. Tingley's evidence at trial was that they left after the showers without speaking to anyone. On discovery in January 1997, Ms. Tingley said that they returned to the room where Todd had been examined and a nurse told them they had been discharged. The discovery evidence resembles the account in the notes more closely than does her trial evidence.

[308] There is some inconsistency as to where the suggestion that the substance was a pesticide originated. Ms. Tingley said, on cross-examination, that the suggestion came from Poison Control. She agreed, however, that when she had attended at Poison Control she had thought it was a pesticide. She felt that Poison Control had confirmed her suspicions. She said she may have used the word pesticide. The Poison Control record includes the notation that she and the children "[h]ave been exposed to ? Pesticide. - rotten wood smell...skin gets wet, burns and turns red."

[309] Although Ms. Tingley agreed she met Mr. Hay before going to the IWK, she did not recall a telephone call with him prior to his attendance at her house. Mr. Hay's notes of the call include references to Ms. Tingley checking her drawers, "all her clothes" being "soaked," and to her request that the RCMP find out what was sprayed on the clothes. He wrote, "she thinks pesticide or bleach." On cross-examination, Ms. Tingley could not say whether the suggestion that the substance was a pesticide originated with her. The Poison Control record notes that Ms. Tingley was advised that their "best guess is that substance is a pesticide that is water reactive but no ways know (without) analysis..." A further note dated "October 4 @11:20" said that VG toxicology had been contacted several times by Ms. Tingley, who stated that the substance was a pesticide containing magnesium. Poison Control advised that the substance could be a number of different products based on the symptomology of burning upon skin contact. Both the Poison Control record and Mr. Hay's notes suggest that Ms. Tingley was the source of the suggestion that the substance was a pesticide.

[310] Mr. Hay's notes dated October 2, 1991 at 12:40 reference a phone conversation with Ms. Tingley and include the notations that Ms. Tingley had taken a wet sweater to Poison Control, and that "IWK think it is a specific chemical." There are also notations stating "fungicide and pesticide. Manganese", "time release chemical concentrated", "she is more concerned with health than house" and "hold off cleaning until we know what it is." Ms. Tingley testified that Mr. Hay's notes of this call appeared to be accurate as to what she knew when she left the IWK on September 30, 1991.

[311] There is also an inconsistency relating to the sweater that Ms. Tingley said she took to the IWK. Ms. Tingley testified that when she and the children went to the IWK, she brought a sweater that was allegedly contaminated with an unknown

substance. It had been washed two or three times after the break in and the colour had changed. According to Ms. Tingley, when the nurse picked up the bag containing the sweater, she dropped it because it was hot and called Poison Control. She agreed that the IWK and Poison Control records do not mention the sweater, and that she did not attempt to recover it. It is strange that the hospital and Poison Control records do not mention the sweater, in view of Ms. Tingley's vivid recollection of the nurse dropping the bag.

[312] Ms. Tingley also said she told Mr. Hay about a death threat she allegedly received just before the break-in, but he testified that he only learned about it later, after the defendants had retained counsel. She said she did not think it was common to receive death threats in her line of work, and denied telling Dr. Klotz that death threats were not unusual. She said she did not remember saying on discovery that death threats were not unusual in her type of business. She said she had a recording of the threat, but that she taped over it because no one seemed interested. She never took it to the police.

[313] Further inconsistencies are raised in relation to Ms. Tingley's attitude toward her brother. Cst. Rice's notes of his conversation with Ms. Tingley on September 29 stated that Ms. Tingley did not trust her brother, adding that nothing of his was touched. Ms. Tingley denied she said this. She said she may have implied this from her saying nothing of his was taken. She added she trusted her brother with her life. In relation to the second break-in, Ms. Tingley denied arguing with Constable Turner that it was probably her brother Kim. She denied saying he was a "compulsive liar", and said the police officer had accused her brother.

[314] There is also a question of consistency with respect to Ms. Tingley's view of who should do the cleaning. Ms. Tingley testified that Mr. Hay wanted James Proper Care and she wanted East Coast Restoration. On discovery in 1999 she told Mr. Proudfoot that she had not checked out James Proper Care before they did the job. In Court she said she knew at that time that they had a bad reputation and East Coast had a good reputation. She said she did not lie to Mr. Proudfoot and that she might have been confused. Ms. Tingley said she knew that she could have had East Coast do the work, but she would have to pay any extra over what James Proper Care would have charged Wellington. On her discovery in September 1999 she indicated that she said she did not know her rights.

[315] These are only some of the inconsistencies, contradictions that appeared in Ms. Tingley's evidence. Although doctors, police officers, and insurance adjusters, like others who make notes of conversations, will make errors in recording what is said, and will sometimes write impressions or assumptions that appear as statements, Ms. Tingley's version of events are at odds with the written record to a remarkable degree. In addition to her disagreements with the accounts given by Ms. Hay, Ms. Strong, Dr. Cullen and Mr. James, she expressed disagreements with evidence given by other witnesses, including persons who would not appear to have any interest in the outcome of the trial or any reason to give evidence adverse to the plaintiffs' position.

[316] Although Ms. Tingley did provide Michael Brooker, one of her several lawyers during the years between September 1991 and the trial, with an outline of events as she recalled them, partly based on notes she had made and which she destroyed after preparing the summary, her evidence was basically her recollection of events and statements that occurred almost twenty years prior to the trial. On the other hand, her discoveries, primarily dating from the late 1990's, were conducted less than ten years after the break-in, and in some cases less than five years. Although she stated on a number of occasions at trial that she was not feeling well during her discoveries, or that she may have been confused or misunderstood the question, and claimed that she was cognitively clearer when testifying in court, the number, and in some cases the relevancy to the issues at trial, of her rejections of aspects of her discovery evidence do not inspire a sense of reliability in her trial evidence.

[317] Ms. Tingley was not the only plaintiff, although it is clear that she was the driving force behind this lawsuit. The first proceeding was commenced by Ms. Tingley, with the other three plaintiffs only joining the second proceeding. There are also concerns as to the reliability and credibility of their evidence. The four plaintiffs are obviously not well. Dr. Cullen acknowledged as much. The extent to which any illness they now experience, or experienced in the past, affected their ability to recall events and statements is obviously unclear. What is clear, however, is that in dealing with the many medical professionals they came in contact with, they were less frank than they should have been.

Margaret Burton

[318] The first time Margaret Burton entered the house, after the break in of September 1991, was on November 20 or 21 (most likely the 21st) , when Mr. Hay, Ms. Strong and Ms. Tingley were at the house. Subsequently she would stay at the house when she was in Dartmouth. She said she would travel between Sydney and Dartmouth, from week to week, until October 1993 when Ms. Tingley abandoned the house. She later separated from her husband and moved in with Ms. Tingley and the children in an apartment in Cole Harbour, and later moved with them to the house on Pelzant Street.

[319] Ms. Burton said it was a long time, a matter of months or a year, after she moved into the house before she got sick. She said she was the first one to show signs, when her skin pigmentation began to change. At trial she said they all developed similar symptoms at different times. She agreed that on discovery in 1999, she had said they had different symptoms. She and Ms. Tingley had bladder problems. Although she acknowledged she had bladder problems before September 1991, she says the problems after that were not the same. She said by 1993 and 1994, she, Ms. Tingley and the children were reactive to food, minded fragrances and chemicals. Ms. Burton said that in 1991 she had burning on her head, changing of her colour and swelling. She later said she had some symptoms by early 1992, and could not remember if she had any in 1991. She believed it would have been the latter part of 1991, or early 1992, that she started having problems.

[320] Ms. Burton was clearly uncertain as to when some of her symptoms first appeared, although overall it would appear to be her evidence that the initial symptoms appeared between December 1991 and early 1992. She said she saw Dr. Elizabeth Mann between January and March 1992 in relation to fibromyalgia and chronic fatigue. However, it was in October 1991, before she first returned to the Smith/Tingley house, that her family doctor had referred her to Dr. Mann. She said her second referral to Dr. Mann was because of symptoms arising from her exposure in the home. She agreed that she told Dr. Mann in January 1992 that she had been feeling better in the months leading up to the visit, as indicated in Dr. Mann's report of February 3, 1992. Ms. Burton agreed that she could have told Dr. Mann that all her life she had intermittent problems with sore joints, but that they were of no major significance until 18 months previously. Her predominant problem had been muscle aching in her hips, arms and legs, neck and back. She agreed that there were better and worse times, and that at times it was disabling. She had been diagnosed with fibromyalgia.

[321] As with Ms. Tingley, Ms. Burton disputes comments in doctors' notes (in this case Dr. Mann's) about what she told them. The disagreement in this case relates to why Ms. Burton stopped running her gift shop. Dr. Mann appeared to suggest she gave it up because of her health problems. Ms. Burton says that is not correct. She said she did give up other business activities on account of her health, but stopped running the gift shop because of the economy. Ms. Burton said a similar misunderstanding or error was made by Dr. Douglas Watt, a specialist in physical medicine and rehabilitation, who also referred to her closing a business due to pain. On cross-examination, she acknowledged that she might have said she closed the gift shop because of the pain, but if she did, it was because she was embarrassed to have gone into bankruptcy. She said she did not agree, that when it was convenient to her, she was prepared to tell doctors untrue information. She did not consider this an untrue statement, but only an attempt to avoid discussing her bankruptcy. Ms. Burton also disputed Dr. Mann's notation that she smoked half a pack of cigarettes per day, a reduction from one and a half packs. She suggested that this was actually per week.

[322] Ms. Burton was referred to an Emergency Room record from September 6, 1986, indicating that she complained of a "sore right shoulder" as the complaint, adding, "no history of injury - muscle spasm". Recognizing she did have such a prior history, Ms. Burton said she did not know what to say about the reference to her having no history of such an injury. She added that she would have had no reason not to tell them that her shoulder had been dislocated.

[323] Ms. Burton acknowledged that there were pre-1991 notations in her medical records relating to skin problems (including contact dermatitis and eczema), a reference to symptoms suggesting lupus in June 1990 (although she was not diagnosed with lupus) and ultimately a diagnosis of fibromyalgia in December 1990. At least two doctors in 1990 made reference to Ms. Burton smoking a pack of cigarettes per day. Ms. Burton commented that she might have said this, but that she did not remember smoking a pack per day. She also denied drinking alcohol, although one report indicated that she did so on occasion.

[324] Dr. Mann reported to Dr. Mohan Virick, her family physician prior to Dr. Deagle, on January 28, 1992, that 18 months earlier Ms. Burton had been "overdoing it at work and developing aching in the body described as burning discomfort and present whether she moved or not". Ms. Burton agreed that they

were not new symptoms, but added that they were getting worse. On cross-examination she said she had thought they were new symptoms, but admitted she was wrong. On October 2, 1992, Ms. Burton complained to Dr. Mann of a flare-up of fibromyalgia. In a report to Dr. Virick on October 5, Dr. Mann referred to "mildly abnormal skin pigmentation". Ms. Burton said this was a new symptom. She agreed that it did not suggest her skin was orange, saying the symptoms were mild. She agreed there was no report of burns or lesions on her head. Ms. Burton said these symptoms occurred later. She said her colour began to change in early 1992, and got worse over time.

[325] Ms. Burton agreed that Dr. Mann took the view in October 1992 that she had fibromyalgia, but not lupus. She agreed that two other doctors, Dr. Ahmed and Dr. Jones, had previously told her she did not have lupus. She had no explanation for a note on Dr. Virick's chart, dated October 23, 1992, suggesting a biopsy to check for lupus.

[326] In June 1992 Ms. Burton complained of pain in the temple and jaw, as well as vertigo. Ms. Burton agreed that vertigo, with lightheadedness and a swimming sensation, were the same symptoms she had in 1980. She said, however, that the symptoms were different in 1992 than in 1981, when she reported the same symptoms. Dr. Chokskyi's report of June 1992 refers to "dizziness getting worse with movement of the head". Ms. Burton said that in 1981 she did not get dizziness from movement of her head. Ms. Burton agreed she had blurred vision in 1981, but said it related to hypoglycemia.

[327] Ms. Burton said she was ill at Christmas 1992 with discolouration, and was unable to tolerate certain foods. Ms. Burton agreed that Dr. Virick's note of January 11, 1993, does not mention any skin discolouration. Tests of her gallbladder came back normal.

[328] Ms. Burton agreed she last saw Dr. Virick on March 22, 1993, and that his chart notes make no mention of lesions in her head, pigmentation change, foul smell, or sensitivity to fragrances. In respect to the smell, she said she was using a stronger deodorant. She said she did not know if she told Dr. Virick about being sensitive to fragrances. She said Dr. Virick must have seen her pigmentation change but she had no idea why he did not make a note about it. She agreed when she left Dr. Virick she was wearing her normal clothes taking normal prescriptions and not wearing a mask. She subsequently became a patient of Dr. Deagle.

Todd Smith

[329] On cross-examination Todd Smith was referred to the transcript of a statement he made to an insurance investigator in March 1994, describing going to the house with his father and sister after the break-in. In the statement he said the TV, VCR and stereo were missing and there was a broken window downstairs. He added, “I had a cold and didn’t smell anything.” At trial, he said he did not recall having a cold at the time, and that he smelled something “old and musty”. In a statement to his counsel in March 1996, he said there was a smell, which he said was not strong, but was “musky”. He later suggested that the smell was “musty”, and that the word “musky” in the transcript of his statement may have been a typo. Six months later on August 14, 1996, Mr. Smith stated on discovery that he did not remember a smell.

[330] Mr. Smith said on cross-examination that everyone lies at times, but that it is different when one is under oath. He agreed, for instance, that he gave an inaccurate description of how he had injured his hand during a 2006 ER visit. He said he was embarrassed by the situation, and immediately regretted lying.

[331] Mr. Smith agreed that in the early 1990's, for a time, he was not convinced that there had been a chemical spill. He said he had problems with his lungs as a child. He was not sensitive right away, and did not have the symptoms that his mother and Ms. Burton had. In a 1996 statement, he had said he had not always believed that the chemicals were related to his health problems, and that he had been skeptical about the complaints of his mother and Ms. Burton. He said he came to believe their version by late 1994.

Kelli Smith

[332] Kelli Smith testified that when she went into the house after the break-in she saw a fog and a detected a "sweet, musty" smell in the same area. She did not point this out to the police. In a statement to Bill Wilson, an insurance investigator, she mentioned the smell, but not the fog. She testified that this statement was incomplete, and that she had associated the fog with the smell. She said she discussed the smell and the fog with her brother and her father, though she did not recall discussing them with her mother. She said the smell lasted after the first day, but seemed to dissipate, or she got used to it.

[333] On returning to the house, Ms. Smith testified, she looked in her room to see if anything had been stolen. She did not notice any stains at that time, but during the week before her mother returned, she saw stains on her window. She said the police thought it was semen. She was referred to Dr. Beresford's note in 2007, that it "looked like dry semen." She responded that she was 14 and the police had told her it looked like dry semen. She said she would not have known what dry semen would look like.

[334] Ms. Smith said there were several meetings with Mr. Hay where she was present, but only one occasion when Constable Rice was also there. She recalled her mother talking about a sweater that had been washed, about visiting Poison Control and about the wet dresser. She also said she was certain her mother discussed the death threat with Constable Rice. She said Constable Rice told them that the crime lab was not able to test, but she understood that the crime lab told him there should be testing done, or that anything absorbent should be disposed of. On discovery, on September 8, 1999, Ms. Smith said the RCMP took a dresser and some clothing, but she did not know why. She also said she did not recall any discussion about testing.

[335] Ms. Smith agreed that she was wrong when she had said her mother had told Constable Rice and Mr. Hay about the sweater and going to the IWK and Poison Control, because the IWK visit had not happened by the time of the meeting. She also agreed, after being referred to police notes, that she was wrong in stating that Constable Rice had taken the back of the dresser at that time. She agreed that she was not home when the panel was taken.

[336] Ms. Smith described a meeting between her mother, Mr. Hay and Ms. Strong, where clothing was discussed, including a stained pair of jeans. She agreed that she had not mentioned this on discovery and said she remembered it since then. She indicated that during the 1999 discovery she had not made much of an effort to think about what had happened.

[337] Ms. Smith testified that her friend Paula Robbins came to the house during the week after the break-in, before Ms. Tingley returned from Sydney. Ms. Smith said Ms. Robbins received burns on her skin when she stayed over, although they did not notice them right away.

[338] Ms. Smith said that when they arrived at the IWK, her mother placed the bag containing the sweater on the triage nurse's desk. The nurse said she could feel heat from it and called Poison Control. This is the sweater she had seen washed by her mother earlier, when the water had turned grey. She said she did not tell Poison Control about the smell.

[339] Ms. Smith said she thought her brother's feet were red when he was examined at the IWK. She said they were told to shower frequently. This contradicted her 1999 discovery evidence. She said she only thought of the details of the IWK visit after 1999. Ms. Smith testified that when her brother came out of the shower at the IWK and was drying off, his skin was rolling off, like a sunburn, except it was grey. She said she understood that they were told not to go back to their house, although she did not know the source of this advice. She said no nurse or doctor saw them after the showers, and that they left their clothes in the shower room. Ms. Smith was referred to her 1999 discovery statement that she had thrown her clothes away at the hotel. At trial, she said it was the hospital clothes that they threw out, and that either she did not remember or she mis-spoke on discovery.

[340] Ms. Smith did not remember if she had symptoms after going to the house the first time. She testified that from January 1992 forward she experienced fatigue, headaches, lung problems, cognitive problems, insomnia and skin problems. The insomnia started in November or December 1991.

[341] Ms. Smith said that by 1994 she realized that she had symptoms as a result of the exposure in the house, but did not admit the full extent. She said she began to have symptoms at Christmas of grade 10, including difficulty sleeping, colds, flu and headaches. She testified that she was very sick during this discovery, and that she was getting confused.

[342] Ms. Smith disagreed with the view of Lois Hare, a Naturopathic doctor, who in a February 9, 1999, note, wrote that she was 14 when the house was contaminated by unknown chemicals and that she began to have allergies by age 16. Ms. Smith said the note refers to allergies, not environmental illness. She said she knew she had symptoms right away, but initially did not tell others.

[343] On discovery on September 8, 2003 in respect of a motor vehicle accident, Ms. Smith said she started having headaches when she was 16, in 1993, and respiratory problems between 1991 and 1993. On cross-examination she dated the

headaches and breathing problems to when she was 16, that is 1993. In an independent medical examination in relation to her second motor vehicle accident, Dr. Maher stated that she had not worked since the onset of her illness in 1993. Ms. Smith testified that she has never worked at a job in her life, and said she did not remember making this statement to Dr. Maher.

[344] Ms. Smith said her father's death did not affect her health, although she was upset for a time. On discovery in 1996 she had referred to recovering from a "state of shock". At trial she said this was a poor choice of words, and that she was referring to "the grieving process." She denied that she felt guilty because he died before they had a chance to meet again. Ms. Smith said she did not think her mother thought her father was involved in the break-in. On discovery in 1999, she said her mother had told her she believed the threats were orchestrated by her father. At trial, she said this was not a serious belief of her or her mother.

[345] Ms. Smith said her symptoms eventually (though not immediately) caused a decline in her school performance. She said her marks started dropping in grade 9. She did not agree with the suggestion that her marks in the first half of grade 10 were as strong as ever, but on reviewing her transcripts, she agreed her marks came up in grade 10, and that for the first half of grade 10 she was on the Principal's list.

[346] Ms. Smith testified that as of December 1994 she was sensitive to chemicals in the environment. She disagreed with Dr. Fox's view that she was not outside the normal range at this time, agreeing that Dr. Fox’s assessment was based on "incomplete and inaccurate information", since she denied her problems at that time. She insisted that when she started having problems, in school, in grade 9, she did not realize what the problems were, nor what was causing them. She said she knew something was affecting her concentration and memory, but only discussed this, with a support person from Dalhousie when she was attending University, in 1998 or 1999.

[347] Ms. Smith admitted that at discovery in September 1999 she had said she had no problems with memory until after 1995. She said she had forgotten that they dated back to 1991. She said her 1999 discovery evidence that she did not have a problem with memory in 1994 was not accurate. At trial she said she had memory problems in grade 9.

[348] Ms. Smith was referred to a letter from Dr. Fox, dated October 22, 1997, stating that she had environmental illness, including cognitive impairment, difficulty concentrating and poor memory. She responded that by that time she knew she had slight problems. She said it did not bother her enough in grade 9 to mention it to anyone, and that in 1997 it was not serious enough to interfere with her school work. She said that by October 1997 she was no longer denying she had cognitive impairment, but was denying its impact.

[349] Ms. Smith agreed that in filling out Canada Pension Plan forms with Dr. Fox she indicated that her illness began in April 1993. She said she did not take time to think about it. Ms. Smith acknowledged that she was wrong when she said in discovery there was no cognitive impairment until 1996.

[350] Ms. Smith said she did not remember her first visit to Dr. Fox. She did not recall if she had ear, nose or throat problems in December 1994, but said she could not eat processed foods and fatty foods bothered her stomach. According to Dr. Fox's report of January 26, 1995, to Dr. Elliott, Ms. Smith "had no abdominal symptoms, her bowels are regular." He also wrote that her appetite was variable and she was losing weight. She did not recall telling Dr. Fox she had no abdominal symptoms. She said she could have been in denial, and partly it could have been because she did not know what was going on. In reference to Dr. Fox noting that she did not have food sensitivities, Ms. Smith said she may not have recognized her problems with processed foods at that time. She also said she was sensitive to perfume at this time. Dr. Fox had noted that she complained only of sensitivity to aerosols, disinfectants and cigarette smoke, but not to perfume. She testified that at that time she probably did deny that she was sensitive to perfumes, because she wanted to lead a "normal life".

[351] Ms. Smith saw Dr. Ann Krane in 2000. Dr. Krane noted, "Last1 ½ yr. - poor judgment, irritable, poor concentration." Ms. Smith said the symptoms are accurate but the reference to only being for the last year and a half was not.

[352] Ms. Smith denied that her mother wanted her to be sterilized. She was referred to the correspondence between Dr. Graves and Dr. Elliott, which indicated that Ms. Tingley had been advised to have the children sterilized, and that Ms. Tingley "insists she be sterilized." Ms. Smith said she did not recall this, and that it was not sterilization, but birth control that was discussed.

MEDICAL EVIDENCE (IN ADDITION TO DR. R. FOX)

Dr. Jean Gray

[353] Dr. Jean Gray was qualified as an expert in "clinical pharmacology and therapeutic medicine capable of giving opinion evidence on the effects of drugs and chemicals on the body and a patient's health". Dr. Gray saw Ms. Tingley and Ms. Burton, in late 1993 and early 1994. On reviewing the AccuChem reports, she said the levels of xylenes and trimethylbenzenes, which are organic solvents that are toxic in excessive quantities were "minimally elevated". The tests did not rule out toxic exposure but she agreed that none of the tests or physical exams confirmed a toxic exposure. The presence of xylenes and trimethylbenzenes in the Accu-Chem lab reports did not give her concern. Although she saw them as potential carriers, rather than as toxins themselves, she said there was no way to determine if in fact they were carriers. She said such substances are ubiquitous in day-to-day materials that are found in homes. She agreed that Ms. Burton's chloroform level was elevated. She did not consider that the Accu-Chem reports showed a toxic substance in Ms. Burton.

[354] Dr. Gray said she would have reviewed the history provided by Ms. Tingley, and would have considered whether another illness could be at work. Based on the suggestion of an exposure to a pesticide, she tested for insecticide exposure. She believed that Ms. Tingley's symptoms were compatible with some types of toxic exposure. The fact there were solvents in the body suggested an organic solvent. The possibility of an insecticide or a herbicide required an organic solvent. The symptoms were compatible with Capsaicin, an active substance in red chili peppers, which is sometimes used in low concentrations as a rub on the skin to dull pain. She could not say if there was one or more than one toxic substance.

[355] In assessing Ms. Tingley, Dr. Gray said she considered her previous health, the physical exam, other substances to which she was exposed, including medications, and the fact she smoked. Her symptoms were not compatible with any of her prescription drugs, or cigarettes. Dr. Gray said loss of weight was a small factor because soluble chemicals can be stored in fat and would be lost when there is a weight loss. Ultimately, Dr. Gray could not confirm or dismiss the possibility of a toxic exposure.

[356] Dr. Gray's statement that from her history she had no doubt there was a toxic exposure was based on what Ms. Tingley had told her. The lab information was normal. The physical exam did not indicate any symptoms. Ms. Tingley indicated that the symptoms dated from September 1991, which Dr. Gray said would indicate when the exposure would have taken place. Dr. Gray said she never told Ms. Tingley to stop working.

[357] Dr. Gray knew Ms. Burton had been treated for hypersensitivity, fibromyalgia and chronic fatigue. Given Ms. Burton's history of fibromyalgia and chronic fatigue, she was concerned there was an underlying disease that manifested itself or was made worse by a toxic substance. She suspected an underlying neurological problem, such as MS, and was not aware that Ms. Burton had been investigated for this in the early 1980s. She did not consider that AccuChem reports showed a toxic substance in Ms. Burton, although she noted an elevated chloroform report from an Adipose tissue test. The referral letter from Dr. Deagle stated that Ms. Burton had been exposed to "the same toxic solution" as Ms. Tingley and the children, and had developed "symptoms of chronic fatigue, depression, generalized fibromyositic and hypertension." Dr. Gray was not aware of any of these symptoms existing before the alleged exposure.

[358] Dr. Gray also reviewed reports from Fenwick Labs. She said that between the two sets of reports there were no surprises and no "smoking gun". She said they were sufficiently removed from the supposed toxic exposure not to permit a conclusion on whether toxic exposure had occurred. She believed she had communicated to Ms. Tingley that neither the Fenwick Labs nor AccuChem reports confirmed a toxic exposure.

Dr. Patricia Beresford

[359] Dr. Beresford began treating Ms. Tingley in 1999, after Dr. Elliott, her previous physician, died. Dr. Bereford acted as her family physician, while Dr. Fox treated her environmental illness. She also treated Kelli Smith. She did not diagnose them, but accepted Dr. Fox's diagnosis. Dr. Beresford was qualified as an expert family physician and environmental physician with training and experience in treating individuals suffering from multiple chemical sensitivity, chronic fatigue, fibromyalgia and other general family medicine matters. Dr. Beresford testified that multiple chemical sensitivity includes fibromyalgia and chronic fatigue. She said she uses two definitions of multiple chemical sensitivity

in her approach to understanding the illness, one by Dr. Mark Cullen and another by Dr. Claudia Miller.

[360] Dr. Beresford said Dr. Miller describes chemical sensitivity as appearing in two steps, induction and triggering. The inducing or inciting initiating exposure may involve any of a wide variety of substances, including pesticides, solvents, in-door air contaminants and drugs. It may be acute, as in a chemical spill, intermittent, as in many industrial exposures or chronic, as in a sick building syndrome. The loss of tolerance seems to occur as a consequence of the initial exposure. Subsequently, extremely low levels of chemicals, levels that do not bother most people and were not previously a problem for that individual, will trigger symptoms. In addition, there is a spreading effect, so that the person may develop sensitivities to things such as food, inhalants, alcohol, caffeine and nicotine. She also said different individuals may have different manifestations and triggers, and may not present the same constellation of symptoms.

[361] Dr. Beresford said chronic fatigue can lead to multiple chemical sensitivity, and fibromyalgia can involve multiple chemical sensitivity as well as chronic fatigue. In chronic fatigue a person with an illness suddenly gets totally exhausted and unable to function. Often they have muscle pain as well. They often develop recurrent infections, and have a difficult time recovering. They also often develop multiple chemical sensitivity. Fibromyalgia is an illness defined by chronic pain. There is often a constellation of illnesses, including irritable bowel, sleep disturbance, interstitial cystitis and cognitive impairment, involved with fibromyalgia.

[362] According to Dr. Beresford, multiple chemical sensitivities and environmental illness impact on a person's ability to take regular medicine. They often have to use more natural forms of medication or specially prepared medications. Her objective is to eliminate the body of things that are “loading it down”, by using clean air, water, and food, while avoiding medications, if possible.

[363] Dr. Gerald Ross was the president of the American Academy of Environmental Medicine for two years and worked at the Texas Centre of Environmental Medicine and also at the Halifax Clinic. She agreed with his philosophy, of “lowering the total load” in an attempt to detoxify a person who has been “chemically overloaded.” She said that if a person has a lot of chemicals

stored in their fat cells, therapy and sauna treatment helps to mobilize the materials out of the body. Dr. Beresford agreed with Dr. Fox's April 1997 letter on how affected Ms. Tingley is and that she is unlikely to return to the workforce.

[364] Dr. Beresford said Ms. Tingley is sensitive to multiple chemicals, pesticides, foods and inhalants. After exposure to things to which she was sensitive, Ms. Tingley would get canker sores, diaahrea, and other symptoms. She was diagnosed with MCS by Dr. Fox, and Dr. Beresford said she accepted the diagnosis.

[365] Dr. Beresford said she used AccuChem for environmental testing, but that the AccuChem reports did not make any particular difference in her dealings with Ms. Tingley. They indicated chemicals in her blood that should not be there. They were done in 1993, two years after the event. They did not affect Ms. Tingley's therapy.

[366] Dr. Beresford first saw Kelli Smith in February 2005. She presented as an intelligent woman, motivated to get through university, but often having to withdraw from courses. She was pale and complained of recurrent abdominal pain. She had chronic pain. Dr. Beresford did not get sense of Kelli malingering or a somatoform disorder. She was constantly struggling and in 2006 she withdrew from University. The exposure to such substances as perfumes gave her difficulty.

[367] Dr. Beresford agreed that patients with multiple chemical sensitivity may benefit from oxygen. She said Ms. Smith would be uncomfortable if she took oxygen while in school. She said there would be a high risk of explosion if a person lit a cigarette near her or if she was near a science lab. It would also be costly.

[368] Dr. Beresford said Ms. Smith was nervous about the examination by Dr. Cullen, and she attended with her. Dr. Beresford said Dr. Cullen did a cursory physical exam, and repeatedly asked Ms. Smith if she had problems accepting her illness. Ms. Smith said she had been in denial. Dr. Beresford said Dr. Cullen did a cursory review of Ms. Smith's schooling, her time at Dalhousie and her symptomatology. She said she was surprised that he did not do a more extensive physical exam.

[369] Dr. Beresford decided to do her own assessment as to whether Ms. Smith had MCS. She said there were many inaccuracies and omissions in Dr. Cullen's

reports. She noted that he dismissed her concern about her gut, which was a major issue to Ms. Smith. Most people with multiple chemical sensitivity have gut problems; it seemed irrelevant to Dr. Cullen, although he had examined her abdomen.

[370] Dr. Beresford alleged that there were various errors in Dr. Cullen's reports. Dr. Beresford noted that he repeatedly said there were no odours in the house, while according to the other consultants, and based on her review with Ms. Smith there was a clear odour in the house. He also suggested Ms. Smith's only exposure in the house was the morning after the break-in. Dr. Beresford said she returned on a daily basis during the week. Dr. Beresford said Dr. Cullen was in error when he said a friend of Ms. Smith's died on the ice; she understood that Ms. Smith barely knew him. She also said there was no reason for Ms. Smith to lose weight over the death of her father.

[371] As to Dr. Cullen's view on multiple chemical sensitivity, his diagnosis and criteria, Dr. Beresford said if Dr. Cullen's guidelines are compared to those of Dr. Claudia Miller and others, his are more specifically related to the chemical issue than the more dynamic view of Dr. Miller.

[372] Dr. Beresford said that in preparing her assessment, she reviewed Ms. Smith's health record from the date of the exposure. She said Ms. Smith had more exposure than Dr. Cullen suggested. She had trouble focussing in school, and her marks in Grade 9 declined. She developed fatigue sufficient to cause difficulty getting up in the mornings, as well as insomnia, headaches and reactive airway disease, which had to be treated with inhalers. Dr. Beresford said the February 1996 move to the Pelzant Street house had some positive effects, as the house had hardwood floor, ceramic tiles, windows and big bedrooms. However, it was also over crowded, and varous sprays, cleaners and other scented products were used. Ms. Smith was reacting to these, as well as to her mother's out gassing smell.

[373] Dr. Beresford said that in 2005 Ms. Smith's major problems were with the digestive tract, diarrhea, vomiting and nausea, as well as chronic rhinitis and post nasal drip. She was limited to organic foods. Dr. Beresford said her review showed Ms. Smith fulfilled the criteria for MCS. She said Dr. Cullen's history and physical did not justify his conclusions about Ms. Smith.

[374] On cross examination Dr. Beresford agreed that in diagnosing MCS, an accurate history is important, and that one would wish to identify any change in health, with access to pre and post incident medical history. She agreed that in diagnosing multiple chemical sensitivity one would want to rule out other things. It is necessary to identify a constellation of symptoms and reactivity levels to chemicals that are tolerated by others. As with any illness, it is important to ensure that nothing is missed. Dr. Beresford said environmental illness is increasingly progressive, and is an evolving illness. She agreed the closer the event to the onset of symptoms, the easier it may be to draw a correlation.

[375] Dr. Beresford had the story from the plaintiffs or from letters, and she knew about the sweater they took to the ER. She had a record of Dr. Grover being concerned about what the substance was and questioning whether it was a particular type of pesticide. She did not contact the IWK or Poison Control for information about the sweater. She did not test for the presence of chemicals in body fluids or tissues, and relied on what she was told about the alleged toxic exposure and its effects. Dr. Beresford did not smell off gassing from Ms. Tingley, and she never witnessed her have a seizure. Dr. Beresford saw skin rashes that may have been the result of reactions and noticed cognitive impairment, including one instance of Ms. Tingley not knowing why she was there.

[376] Dr. Beresford completed a Disability Tax Credit Form, dated April 19, 2001 on behalf of Ms. Tingley. At the time she filled out this form, she said, she had a basis to answer as she did. Ms. Tingley was leading a restricted life, attempting to avoid environmental exposures. At that time she had not seen cognitive impairment, but she had the neuropsychological reports and Dr. Fox's report.

[377] Dr. Beresford completed a medical report for Kelli Smith's Canada Student Loan, dated Feb. 10, 2007. In respect to a question "requesting a description of relevant physical and/or mental findings to explain the applicant's limitations," Dr. Beresford wrote that Ms. Smith had been "exposed to multiple toxic chemicals in huge amounts." Dr. Beresford said she did not know what Ms. Smith was exposed to; she knew that whatever it was, it was spread all over the house, the carpet, the walls and ceilings. She said she knew this from the description by the numerous consultants, the plaintiffs and the video. Dr. Jean Gray, Dr. Deagle and Dr. Fox all spoke of toxic chemicals. If something is all over the house, on the walls, ceilings, and carpets, she said it would not be a small amount. On discovery in 2008, Dr. Beresford agreed that the only evidence she had that there were multiple

chemicals was a fat study; she agreed she did not know how much they were exposed to.

Dr. Ann Krane

[378] Dr. Ann Krane was qualified as an expert clinical neuropsychologist with experience in assessing and rehabilitating brain injuries and cognitive impairment arising from Multiple Chemical Sensitivity or Environmental Illness. She was contacted by Ms. Tingley to do a psychological test of Kelli Smith. Dr. Krane said she had never diagnosed MCS. She most often deals with cognitive problems; but in doing so she hears these patients speak of their medical problems and the effect it has on them. She tests for the cognitive aspects of MCS to make sure they are not exaggerating or fabricating.

[379] The reason for the assessment by Dr. Krane was to assess Ms. Smith's neuropsychological status and to obtain a cognitive profile. She was concerned with Ms. Smith's intellectual ability, her memory and her attention to problem solving. The conclusion of her cognitive profile was based on the data she gathered and not on the fact that Ms. Smith had been diagnosed with MCS. The testing suggested cognitive impairment; it was consistent with other persons with multiple chemical sensitivity. She said however, it is also the most common finding for anyone with cognitive impairment, that is, a brain injury. While this is easy to fake, she had other means to establish whether she was faking, and having done these, she did not see a basis for this.

[380] One of the complications of environmental illness is memory functioning. Dr. Krane said everyday problems of memory are not true memory disorders, but one problem with modulating attention. She said Ms. Smith's memory function test revealed a standard profile with multiple chemical sensitivity; it was really an attention problem, rather than a memory problem. Her performance in a pristine environment was better than it would have been in an ambient environment. In a regular school environment her attention would have fallen off even further. The term "brain fog" is sometimes used to describe this situation, where the thinking process slows down.

[381] Dr. Krane said Ms. Smith displayed no evidence of language problems, and no problems with visual, auditory or tactile sensation or perception. She said Ms. Smith was a very motivated young woman whose academic skills were not

consistent with her intellect. She believed Ms. Smith would benefit from cognitive retraining in a clean environment.

[382] Dr. Krane also did a neuropsychological assessment of Todd Smith. She said Mr. Smith had problems with word finding, but not with vision, hearing or touching. He did well on memory and new learning in a pristine environment. There were problems with attention and concentration, however, which would be more dramatic when he was exposed to triggering chemicals. However, he did have impairment in a pristine environment, which was consistent with multiple chemical sensitivity and environmental illness. She said his neuropsychological profile was consistent with a person with cognitive dysfunction due to environmental illness. She believed he could complete high school and could go to college.

[383] On cross-examination Dr. Krane said she did not find it necessary to get a complete history of the toxic exposure nine years previously. She relied on the report by Dr. Roy Fox as the basis for her understanding that there was environmental illness. She was not aware that Dr. Gray, a toxicologist, reported that the AccuChem report was not helpful. She was not told there was a report that the chemicals in the carpet and paint were chemicals typically found in carpets and paint.

[384] Dr. Krane believed Ms. Smith's school records indicated a significant impact. She did not know if the absences were the only reason for her decline. She assumed Ms. Smith had cognitive problems in grade 9 even if she did not appreciate it at the time. Dr. Krane was not aware that Ms. Smith had been in the middle of a custody battle (and had testified at the hearing) or that there were claims of abuse by her father, beyond an implication of emotional abuse. She was not aware that it had been suggested that Ms. Smith see a psychiatrist on account of stress. She agreed that these factors could create stress, fatigue and poor school performance and could interfere with concentration. She also agreed that having mis-information might have affected her opinion. Dr. Krane also agreed that the disruption of moving out of the home could affect school performance. Dr. Krane agreed that, in Todd Smith's cases, mononucleosis could have accounted for the drop in his grades in 1995. She was also directed to the evidence that he had considered suicide after his father died.

[385] Dr. Krane agreed that a common feature of Somatoform Disorders (such as hypochondria) is the presence of physical symptoms that suggest a general medical condition . It is difficult to distinguish between Anxiety Disorders and Somatization Disorder. Conversion of panic and anxiety into physical symptoms is sometimes associated with Somatization disorder.

Dr. Joseph Lawen

[386] Dr. Joseph Lawen was qualified as an expert clinical urologist. Urology is the medical specialty relating to the kidney, urinary system, and bladder. Patients are referred by family physicians or by other specialists. Dr. Deagle referred Ms. Tingley to Dr. Lawen by letter of September 1993. Dr. Deagle wrote that Ms. Tingley had been exposed to a toxic solvent, which he stated was "probably Xylenes and Trymetholbenzene" and that she had suffered "bilateral flank pain, irregularity in urine, and recurring lower urinary tract infections with persistent microhematuria". From Dr. Deagle's letter, Dr. Lawen understood that Ms. Tingley was reporting toxic exposure and she was having a myriad of symptoms.

[387] On cross-examination, Dr. Lawen agreed that Ms. Tingley's symptoms could be unrelated to toxic exposure. On examination, her urine showed no signs of infection, no blood and no pus. In his opinion Ms. Tingley was not ill on September 7, 1993. He told her that he could not speak to any toxic results of the alleged exposure, as this was outside his expertise. He recommended she see Dr. Gray, an internal medicine specialist and a pharmacologist with expertise in the toxicity of chemicals and drugs.

[388] Dr. Lawen understood that Ms. Tingley complained of bladder issues since the summer of 1993. In December 1993, he could find no physiological or pathological explanation for burning, nocturia, frequency or urgency.

[389] Dr. Lawen wrote to Dr. Deagle, on February 10, 1994, having seen Ms. Tingley on February 8, 1994.

> I understand that a laboratory in New York has found fat biopsies to be excessively high for chloroform and that she may have some internal organ toxicities. She did mention that her urine was, on occasion, somewhat mucousy. I noticed that a urinalysis from September showed 30 MG/L. of protein. In addition, there were some hilan casts, the serum creatinine from that date was, however, normal. I've requested a repeat urinalysis and if this continues to show proteinuria, ...

[390] On April 5, 1994 there was another urinalysis, which Dr. Lawen said showed nothing abnormal.

[391] Dr. Lawen was not aware that Dr. Gray did not consider the AccuChem report as being supportive of a toxic exposure. He was left with the case of a patient relating a toxic exposure, and tests showing two chemicals. The expert felt they were carriers, and no toxic agent was identified. He said he does not second-guess the history given by a patient, but agreed that this might be a weakness in the process.

[392] In a letter to Dr. Ross, dated August 29, 1994, Dr. Lawen wrote of the "concerns about the possibility of bladder changes occurring due to the chemical exposure". He said this was a concern expressed by Ms. Tingley, not by him. While she was presenting symptoms, the tests were coming back normal. (e.g. the haematology, uranalysis and chemical chemistry tests on August 8, 1995).

[393] Dr. Lawen said he found nothing objective between September 7, 1993 and August 21, 1995 (when a cystoscopy was done), that would link Ms. Tingley's symptoms to a chemical exposure. The symptoms she reported, together with the procedures he did and the two-year follow-up, he agreed, was a common occurrence in his practice with women. He agreed that if she had not mentioned toxins, he would not have asked.

Dr. Jennifer Klotz

[394] Dr. Jennifer Klotz was qualified as an expert clinical dermatologist with an interest in treating a wide variety of patients including administering and interpreting patch testing. Dermatology is the study of skin diseases that can result from internal or external problems. Patch testing is an allergy test to determine if people react to chemicals on their skin.

[395] Dr. Klotz saw Margaret Burton and Patricia Tingley in 1994. Neither of them had skin rashes. Ms. Burton said she felt very weak and had headaches and felt "lousy" when she was exposed to certain things. Dr. Klotz believed a patch test would establish if she was allergic to compounds in the chemicals. She put chemicals on Ms. Tingley's back. One of the tests burned almost immediately. This was a concern because the reaction was very quick. Dr. Klotz said she had "never seen anyone react so quickly". After fifteen to twenty minutes she had to

remove all the patches. When she removed the strip, she did not see any skin changes. She took Ms. Tingley's vital signs, blood pressure 120/80, and pulse 80, neither of which was a concern. Ms. Tingley's vital signs were good. At no time did she observe any physiological signs of the symptoms she complained of.

[396] Dr. Klotz said Ms. Tingley reported that "she had trouble remembering words and she puts them in the wrong order." She did not observe this problem. She said Ms. Tingley was very clear and organized in detailing her medical history.

[397] After 20 minutes of the test on Ms. Burton, the patches had to come off her back, as she was complaining of lightheadedness, and nausea, to the point where she thought she would vomit (but did not). Ms. Burton reported a metallic taste in her mouth, tingling in her legs and problems with the vision in her left eye. She had two positives on Ms. Burton's back. Ms. Burton lay down for about half an hour and seemed to recover from all the symptoms except fatigue. She still had some dark spots in the vision of her left eye and tingling of her lower legs.

[398] Dr. Klotz found no evidence of a toxin. Her comments were based on what Ms. Tingley and Ms. Burton told her, and their reaction to some of the chemicals on their backs, (for example, lightheadedness, and spots before their eyes). She said if there was an identifiable skin reaction, she would recommend they avoid that material.

[399] Dr. Klotz said her understanding of the events of 1991 came from Ms. Tingley, including her understanding of the death threat, which Ms. Tingley said was not that unusual in her type of business. Dr. Klotz could not remember if Ms. Tingley elaborated on why a person in her business would get death threats. She said Ms. Tingley told her the house had been tested two years after it was sprayed and was still labelled contaminated, and that it was sealed off. Dr. Klotz had the impression an authoritative body (such as the City) had condemned the house.

[400] Dr. Klotz agreed it is possible a person may believe they are suffering from toxic poisoning and be told that they are receiving a substance they is known to be reactive, and for the person to feel the reaction based more on apprehension or nervousness. The reaction may possibly be more hysterical than a direct physical reaction. The person may feel ill. If a person has a psychological response, she said, it would be expected fairly soon after the substance was put on them. There

could be increased blood pressure, sweating, increased heart rate, and difficulty breathing. A person with an immediate response, and with no variation in observable signs, may be having a psychological response. Dr. Klotz agreed she had not seen these reactions without some signs before. She said Ms. Tingley's reaction would fall into the category of immediate. There was no corresponding skin irritation; there was no variation of her vital signs. She agreed it was possible the reaction was psychological rather than physiological.

[401] Dr. Klotz did not notice any change in the colour of Ms. Burton's skin, such as yellow skin. In Dr. Klotz's view she looked quite healthy. She did not observe bruising on Margaret Burton. She noted that Ms. Burton seemed to have advanced sun damage to her skin. She agreed that there were no observable signs to accompany Ms. Burton's subjective complaints and symptoms.

[402] Dr. Klotz could not connect Ms. Tingley's and Ms. Burton's reactions to the patch tests to a chemical spread in the house. On re-examination, however, she said that if she thought a patient was having hysterical reactions, she could have noted it. She said she did not think their reaction was hysterical.

Dr. Jeannette McGlone

[403] Dr. Jeannette McGlone was qualified as an expert psychologist, with a practice limited to neuropsychology, with experience in assessing brain injuries and cognitive impairment arising from Multiple Chemical Sensitivity or Environmental Illness. She generally assesses intellectual, problem solving, memory, both verbal and nonverbal, language ability, spatial construction, motor skills, eye hand coordination and other areas.

[404] Dr. McGlone said Ms. Tingley's problems were diverse. Her information about her background and the health issues came from Ms. Tingley directly and from medical reports. Dr. McGlone wrote:

> For the past 4 years, Ms. Smith's life has been dictated by the dramatic deterioration in her health and that of her two children (who also were exposed to toxins in the home). She gave the imp ression of being able to manage and cope with all manner of losses, though not without experiencing a considerable amount of anger ("rage") and frustration. In relation to ongoing mental symptoms, she complained of word finding difficulty and literal paraphasias. At times she misnames things or reverses the words and letters. Reading and Spelling have also been problematic for Ms. Smith. . . . Other complaints included misplacing objects, memory loss for details about her past clients/caseload, and losing track of her thoughts in conversations. She indicated that she had trouble translating her ideas into words. For the most part, Ms. Smith

> judged that her cognitive difficulties were improving, though she felt she was not back to normal. However, her ability to function varies with her health. For example, the IV injections produce pain and she has lost consciousness during one of them. Eating a big meal creates extreme fatigue. If exposed to perfumes or javex she experiences "brain fog" feels ill and nearly passes out...

[405] Dr. McGlone concluded that Ms. Tingley's neuropsychological profile was "valid, and abnormal. Mild to moderate impairments were documented in recall for nonverbal material, verbal list learning, verbal fluency, abstract thinking and speed of mental processing". She said the term "valid" means Ms. Tingley was giving her best effort, not faking or malingering.

[406] As to Ms. Tingley's prognosis, Dr. McGlone expected "very little improvement.... 3 - 5 years after being exposed to toxins...." She said a spontaneous recovery would normally occur in the first six months; she believed the impairment was permanent. She wrote that it appeared that Ms. Tingley's level of physical health would determine whether she could maintain any employment. Dr. McGlone believed that any such employment would be non-professional. She recommended consultations with Dr. Ann Krane, who had experience in training and rehabilitation in relation to chemical sensitivity.

[407] Dr. McGlone assumed that Ms. Tingley's cognitive problems began in September 1991, based on the medical history and Ms. Tingley's own account. She did not do a cognitive function analysis for the years 1991, 1992, or 1993, because she was asked to address Ms. Tingley's condition in 1995. She did not know if the impairments and deficiencies in 1995 were present between 1991 and 1993. On cross-examination she stated that it would be impressive for a person to do well in business with the cognitive impairments and deficiencies Ms. Tingley had shown in May 1995.

[408] Dr. McGlone's opinion was based on tests, her estimate of pre-morbid functionality, medical reports and Ms. Tingley's history. The history was that Ms. Tingley was exposed to toxins in 1991, and was diagnosed with many things, including multiple chemical sensitivity. She did not diagnose it but accepted she had been so diagnosed.

Dr. Mark Cullen

[409] Dr. Cullen was qualified as an expert physician in the fields of occupational and environmental medicine, general internal medicine, epidemiology and public health, capable of giving opinion evidence with regard to the diagnosis and treatment of health conditions prevalent among people with environmental concerns, including the diagnosis and treatment of multiple chemical sensitivity, the effects of chemicals and their impact on human health and the assessment of indoor air quality. The qualification was subject to a restriction on any opinion evidence as to the technical aspects of operating equipment used in assessing indoor air quality.

[410] In preparing his initial reports on the plaintiffs, Dr. Cullen relied on documentary material received from the defendant's counsel. He acknowledged that when physicians write notes and reports, there may be errors, omissions or misattributions, but took the view that, taken in the aggregate, they provide a "rather steady accumulation" of what the patient was saying and their apparent condition over time, subject to some variation from observation to observation and report to report.

[411] Dr. Cullen's opinion was that none of the plaintiffs met "reasonable case definitions of multiple chemical sensitivities." He concluded that Dr. Deagle's influence was significant to the plaintiffs' belief that they suffered from MCS.

[412] In response to the plaintiffs' suggestion (and the view of Dr. Beresford) that he did not conduct adequate physical examinations, Dr. Cullen said that in most cases patients with multiple chemical sensitivities have normal physical examinations. In reference to the examinations he conducted, he said:

> I say that is a medical examination. And this is not to say that there aren't on occasion important things to be learned by physical exam. Each of these individuals at the time that I saw them had seen dozens of physicians of various specialization.
>
> Many physical examinations had been performed. And the likelihood of discovering ... largely by some chance a physical finding which would change the underlying diagnosis seemed relatively nil. As I pointed out, there are no physical manifestations on examination of multiple chemical sensitivities.
>
> The reason that I typically examine a patient is to look for alternative diagnoses. And in this case, other than the several things that I thought the individuals themselves brought to my attention, the likelihood was small.

[413] The “paradigm” that arose, according to Dr. Cullen, was that “it was the physicians who taught the patients that this relationship was what was going on, and not the other way around.”

[414] Dr. Cullen said it would be relevant that a patient with suspected MCS had lived in a house with mould, noting that some MCS cases arise after living in a building that contains mould.

[415] Dr. Cullen did not believe that the AccuChem reports established that any of the plaintiffs were poisoned by a toxic chemical spread in their house. He noted, in particular, that the samples were obtained two years after the break-in, after the plaintiffs had left the house.

Dr. Cullen’s Opinion of Todd Smith

[416] In Todd Smith's case, Dr. Cullen’s view was that there had been a pattern of asthma flare-ups after respiratory infections. The respiratory illness had originated in childhood, and had “more or less completely disappeared” by the time he was 13 or 14 years old. The break-in occurred toward the end of this period, and Dr. Cullen said there was only one episode of recurrence documented after the break-in. However, he noted, in the year before the break-in, Mr. Smith had several of the worst asthma episodes that he ever had, each of them probably associated with a respiratory tract infection and treated with steroids. He had been referred to a lung specialist in 1990, some 18 months before the break-in, due to asthma concerns. In the spring of 1992, the specialist discharged him. Dr. Cullen noted that Todd Smith had a respiratory tract infection just before the break-in, according to his medical records, and his view was that this infection probably caused the later asthma attacks. He concluded that Mr. Smith was already experiencing an infection when the break-in occurred.

[417] Dr. Cullen did not consider the October 4, 1991, visit to the IWK as supporting the conclusion that there had been a change in Todd Smith’s health. Dr. Cullen's view was that no toxic event had occurred in the house, and that the evidence he reviewed did not suggest an exposure of any significance or relevance. With respect to the September 30, 1991, visit to the IWK ER, Dr. Cullen said there was no evidence of a health consequence to either child. The issue regarding the consultation with Poison Control, he said, was more complex in that the Poison Control officers had no direct access to the physical site or information, and could

only rely only on the information relayed to them about symptoms and circumstances. He added that the report discussed various possibilities as to what the substance might have been.

[418] Dr. Cullen also took the view that when the plaintiffs returned to the house in November, there were no health effects from returning to the environment where the exposure reportedly occurred.

[419] Dr. Cullen believed that if Todd Smith was going to develop multiple chemical sensitivities from an exposure in the house between September 1991 and late 1993, it would have manifested itself during this period. However, he said, this two years appeared to be "one of the periods of his childhood in which there was least evidence of any adverse health." He said MCS does not develop "as a long-delayed, latent consequence of an exposure that may have taken place at some long previous point in time." He said this was not the pattern of MCS, adding that it is "only the relationship in time that allows us to recognize and diagnose multiple chemical sensitivities."

[420] Dr. Cullen considered the reported elevation of chloroform in tissue samples as a "largely uninterpretable finding." Given that chloroform is volatile, evaporates rapidly, and has a "potent and unmistakable odour," he said, it "could not reasonably have been either in the household at a time several months before when these individuals were last in that household." He suspected that the chloroform was a contaminant from the lab where the samples were processed.

[421] Dr. Cullen said Todd Smith's tolerance of cigarette smoke made a diagnosis of MCS unlikely, saying this is "probably the number one untolerated substance among all of the multiple chemically sensitive people" that he had seen. He said that if a person claiming to have MCS could smoke, he would be incredulous, unless they felt sick when they smoked. He interpreted Todd Smith's ability to tolerate second-hand smoke as evidence that he was not unusually chemically sensitive.

[422] Dr. Cullen said he was familiar with the term off-gassing in physical chemistry, but he was not aware of any evidence of it occurring "as an apparent biologic idea in reference to environmental chemicals."

[423] Dr. Cullen's view was that Todd Smith's asthma had resolved as he got older, but after the events of 1991, and after his father died, “the family, for reasons that are still not entirely apparent ..., chose to view many of [their] health problems ... from an environmental point of view.” He did not believe that this was related to any actual biological change. Rather, he said, “starting in late 1993 and moving forward” Mr. Smith “began to suffer greatly from a functional point of view,” with deteriorating school performance and increasing anxiety. Rather than MCS, Dr. Cullen believed, Mr. Smith suffered from “mild asthma, a few small congenital problems of relatively small importance, and a very serious anxiety-related set of disorders.” He believed that Mr. Smith had been “taken along for the ride,” as he put it. By this, he said, he meant the following:

> ... I mean it in the obvious literal English language view that not he but other members of the family had serious environmental concerns. And as a consequence of which he, along with other members of the family, sought attention from environmental physicians.
>
> And that this became a paradigm of viewing the health issues of all of them from an environmental-exposure perspective which, at least in Todd's case, I find no basis for in any of the experiences. And the closest one might come is the [inaudible] experience of burning feet that he had the night of his return to the house after the break-in which proved nothing, as many other examinations had proved.
>
> Other than that, there's not a shred of evidence prior to the evaluation by environmental physicians that physical environment was either of concern to him or in fact causing a health problem for him.

[424] Dr. Cullen noted that Todd Smith appeared to be healthy when he met him, and "wasn't terribly shy about that point." He went on:

> [.....] when asked ‘How do you feel generally? How would you rate your own health,' he rated it rather good and pointed out that, although he did limit himself both from a dietary point of view and to some extent from an environmental point of view what he would do and how he would spend his time, that he balanced those limits against the needs and desires of ... [a] single individual in his late 20s.
>
> ... [h]e quite unabashedly described his work situation which certainly involved numerous environmental exposures, because people who work in a liquor store often are exposed to tobacco smoke and other such things.
>
> He described going out with his friends. And although he said he probably went out less than he might otherwise were he not, quote, sensitive, he nonetheless did those things and socialized, was involved in an active, ongoing social relationship with a partner. And felt that he, but for some self-imposed limitations of the kind described, lived a relatively normal life.
>
> He did use inhalers sometimes for respiratory complaints, as he had for his asthma as a child. He did have some specific focal issues that he spoke about....But was generally well.

[425] Dr. Cullen concluded that Todd Smith did not perceive that he had environmental health complaints for several years after the break-in. However, when "he was taken along with other members of the family first to Dr. Deagle and later to Environmental Health Clinic or to the centre for extensive evaluation," he was diagnosed with environmental illness and treated with IVs "whose only use to my knowledge is for the treatment of so-called environmental illness." The result of the physicians' belief that he was suffering from a form of environmental illness was that "for better or for worse over time, certainly between that time and the time that I saw him in 2005, he had come to accept that paradigm, that understanding, that part of his health problems were because he was sensitive to the environment."

Dr. Cullen's Opinion of Kelli Smith

[426] According to Dr. Cullen, on his review of her medical records, in 1993 Kelli Smith began to report what he interpreted as "stress-related difficulties," and went from being "entirely well...with common childhood illnesses" to developing what appeared to be "more chronic and persistent health complaints..." He referred to physicians' notes in March and May of 1993 that referred to physical abuse by her father and a request for psychiatric consultation. The notes also made reference to a custody battle, difficulty sleeping and a friend having "died under the ice this winter." There was also a reference to the death of her grandfather and declining school performance. He concluded that the core of Ms. Smith's problems was extreme emotional stress. He said the loss of weight after her father died was not unusual, the death of a parent being a major traumatic event.

[427] Dr. Cullen concluded Dr. Fox's assessments of December 1994 and October 1995, neither of which indicated MCS, were consistent with his own views, with the additional concern about Ms. Smith's emotional state. Dr. Cullen's impression was that Ms. Smith had never suffered from multiple chemical sensitivities. He stated in his report of May 18, 2004:

> Whatever may or may not have occurred in the house in which she was resident; she had no symptomatic response to it at the time of her initial exposure, nor subsequently, recurrent episodes of tonsillitis considered in some reports as being possibly related to the environment are far better explained by the pattern of six episodes a year dating back several years before the incident. Other reasons for considering Multiple Chemical Sensitivities a wrong diagnosis have to do with a lack of any evidence that primary symptoms in 1993 and 1994, when she became more symptomatic, were related in any way to chemical exposures. Moreover, she was at least on occasion a cigarette smoker, a pattern of activity quite uncommon in subjects with Multiple Chemical Sensitivities. In fact, except in those seriously addicted, smoking virtually rules out MCS. Indeed, other than the

> ascription of this illness by physicians at the Environmental Health Clinic, there is virtually nothing in the record to suggest that exposures to chemicals were an important contributory or causal factor in any of her clinical manifestations, whatsoever.

[428] Dr. Cullen emphasized that in his view, the record suggested that Ms. Smith was under "an extraordinary amount of stress" and that the "stressors succinctly explain the level of her symptomatology and functional difficulty ... far better from any theory about chemical exposure."

[429] Dr. Cullen also took note of the records indicating that Ms. Tingley inquired about having her daughter sterilized. He said he had never seen a case of complications in pregnancy or birth as a result of MCS.

[430] Dr. Cullen noted the initial denial by Ms. Smith as to the environmental source of her health problems. He concluded that as a result of various issues in her life, and as her chronic health problems grew, Mr. Smith "came to believe that the environment was the best explanation for it," like the other family members had. Dr. Cullen did not deny that Ms. Smith was now in poor health.

Dr. Cullen's Opinion of Margaret Burton

[431] Dr. Cullen offered the following opinion with respect to the medical history of Margaret Burton:

> ...Ms. Burton is a woman who, over a 12- or 13-year period of time, had a sequence of three major clinical episodes starting with her episode of sudden paralysis and central nervous system symptoms back in 1981 through her gastrointestinal illness in the mid-80s, and further with her musculoskeletal disorder beginning in the late 80s, all of which resulted in evaluation of completely normal laboratory tests, failure to find more than a functional diagnosis.
>
> Notwithstanding that life circumstances during this period changed, nothing about her health ... appears to have changed, other than this. She sought many physicians during and after the time of the break-in and the time she moved into the house with other members of the family in 1991 without any change in her health status, not any comment that was made to a physician about a change in her health status, or any evidence of environmental reactions or concerns up to the time that she apparently begins treating with Dr. Deagle.
>
> And although I am unaware nor can the record from my point of view document any change in her health status at that point in time, she finally gets a diagnosis of severe environmental illness which not only cannot be excluded as her previous illnesses had been by appropriate physiologic tests, but which by all appearance was documented by physiologic tests, by which I mean the blood test and the adipose tissue test ...

[432] Dr. Cullen concluded that the record relating to Ms. Burton had been "rendered more difficult" by "exaggerated or outright false information" that had been passed between doctors. An example, he said, was "a very thorough and actually quite thoughtful letter from Dr. Gray to Ms. Burton's referring physician dated May 18, 1994, in which a very detailed past history is provided, and no single mention is made of any of the approximately 100 visits by the patient between the late 1980's and 1993 for musculoskeletal pain to rule out lupus." He said it was often impossible to trace the source of such errors and omissions, but it was clear that Ms. Burton's physicians from late 1993 and after believed that she was a "completely well individual whose life had changed dramatically somehow at the end of 1991, and had readily at hand at least one possible environmental explanation for that."

[433] Dr. Cullen formed the view that the physicians had made "little effort ... to ask the kinds of questions or ... review the record from the beginning which make quite apparent that that's not the case at all. That the major complaints ... in fact, this patient had become disabled in December of 1990, a year before any of these putative exposures occurred, and had become disabled for severe clinical symptoms." Dr. Cullen did not doubt that Ms. Burton "was feeling quite sick, and has continued to feel quite sick." He added, however, that what was "remarkable" was "that physicians evaluating her were looking through a very, very distorted lens, because they are either missing facts or ... important historic facts had been withheld."

[434] Dr. Cullen believed that Ms. Burton suffered from fibromyalgia, and possibly chronic fatigue syndrome, before September 1991, but did not believe that she met the profile for MCS. He did not believe that her illness had its onset after a "discrete environmental exposure of any documentable kind." If she was unusually sensitive to chemicals in the environment, he said, there was no basis to connect this to any event between 1991 and 1993, or to living in the Smith/Tingley house. He believed that she had been persuaded by the same "paradigm" that convinced Todd Smith and Kelli Smith that they had environmental illness:

> ...I've already commented on the children and the degree to which my own perception is that, although their health had not changed during this period of time other than because of the stressors in 1993, that the notion that this was all environmentally induced was something that in essence they were taught as a consequence both of physician education, but also what eventually became a family understanding.

> I would have to say that I believe in a different way the same is true of Ms. Burton. For her, I don't think it was so much a matter of taught as what must have been a very gratifying moment for her in the sense that she had had many serious, unexplained health problems over the years, all lacking a single major diagnosis that helped unify her understanding.
>
> And she found herself now for the first time with a coherent, apparently verified diagnosis which fit her perception of her health, you know, over this period of time. And therefore, I think ... it stuck. It worked for her.

[435] The result, he said was "a great deal of misapprehension on the patient's part and on the physician's part...."

Dr. Cullen's Opinion of Patricia Tingley

[436] In his report dated October 27, 2005, Dr. Cullen made the following remarks with respect to Patricia Tingley:

> My impression overall after meeting with Ms. Tingley is not strongly changed from my previous conclusions. I believe she is at the present time quite well compensated with a variety of relatively poorly characterized chronic symptoms, including, by her report at least, significant cognitive dysfunction. No cognitive dysfunction was evident during the 150 – minute interview. By report, she remains sensitive both to foods and airborne environmental triggers, which precipitate a variety of central nervous system, respiratory tract, and gastrointestinal symptoms, but occur rarely because she avoids such materials. Despite this stated pattern, I do not believe that Ms. Tingley meets clinical criteria for Multiple Chemical Sensitivities, not only because of my continued skepticism about the environmental origins of her condition, but more importantly ... that I believe the associations between the environment and her symptoms have been heavily patterned by a paradigm presented to her by her treating physicians, rather than the reverse, which is hallmark of MCS.

[437] As with the other plaintiffs, Dr. Cullen did not believe that Ms. Tingley was exposed to a toxin or that she has multiple chemical sensitivities. His impression was that, unlike the other plaintiffs, she experienced symptoms after returning to the house on September 29, which were neither "clinically documented at that time nor typical of environmental effects." He formed the impression that she subsequently "began developing a range of clinical difficulties, somewhat new for her as described finally in her visit with Dr. [Deagle] and others starting late in 1993." He concluded that "probably because there was no evidence of an environmental exposure or trigger or cause and because of her persistent smoking she was behaving like someone who had gone through a considerable stress associated with the break in." He added that "she was behaving like someone with Post Traumatic Stress Disorder." Dr. Cullen did not believe that Ms. Tingley met the criteria for MCS, or that there had been an "initial toxic episode, be it a single event or a protracted one." Her continued smoking argued strongly against a diagnosis of MCS, he said. Additionally, by the time of trial he was aware of her

reports of “her high level of work function working overtime and successfully and ... not only sustaining but building a business during the period, this would be highly contrary to the natural history of Multiple Chemical Sensitivities,” which he said was “not always severely disabling but rarely occurs in the setting of functional growth and economic growth.”

[438] At trial, Dr. Cullen repeated his opinion that Ms. Tingley had embraced the “paradigm” of an environmental source to her health problems originally as a result of Dr. Deagle’s influence.

BURDEN OF PROOF

The Nature of ‘Proof on a Balance of Probabilities’

[439] Lord Bingham suggests, in "The Judge as Juror: The Judicial Determination of Factual Issues”, *The Business of Judging: Selected Essays and Speeches* (Oxford University Press, 2000), at p. 4, that judges are similar to historians, auditors, accident investigators, loss adjusters and doctors, in being asked to determine what happened at some time in the past. However, he writes:

> The common law judge, it is often said, unlike his counterpart in a civil law system and unlike the other investigators I have mentioned, is not concerned with establishing the truth of what did or did not happen on a given occasion in the past, but merely with deciding, as between adversaries, whether or not the party upon whom the burden of proof lies has discharged it to the required degree of probability.

[440] He goes on to cite Lord Denning's remark that "the due administration of justice does not always depend on eliciting the truth. It often depends on the burden of proof." Nonetheless, Lord Bingham also notes that the reality of trial is an attempt "to find out the truth, and to do justice according to law." (Citing Lord Denning in *Jones v. National Coal Board*, [1957] 2 Q.B. 55 (Eng. C.A.) at p. 63).

[441] The burden of proof in a civil case is a "balance of probabilities." Saunders J.A. (concurring in the result) made the following remarks in *McCarthy v. Nova Scotia (Workers' Compensation Appeals Tribunal)* (2001), 193 N.S.R. (2d) 301, 2001 CarswellNS 165, (N.S. C.A.) at para. 75:

> It is trite law that in evidentiary matters the burden is upon the party who asserts a proposition, to prove it. In this, a civil case, the standard of proof is said to be on a preponderance of evidence, or a balance of probabilities. Such a standard is obviously less stringent than proof beyond a reasonable doubt required in a criminal case. Nonetheless, there is a well known *grey area*

between those two standards. It has long been recognized that the seriousness of the allegation will dictate the *sufficiency of proof* required to meet the requisite degree of *persuasion* demanded in a civil case. That is to say, evidence that creates only suspicion, surmise or conjecture is insufficient. It is essential that the quality and quantity of the evidence be such as to lead the trier of fact - be it judge, or jury, or tribunal - acting carefully, to be satisfied to that level of persuasion, commensurate with the seriousness of the allegation. Lord Denning described the proper approach in *Bater v. Bater*, [1950] 2 All E.R. 458, at 459:

> It is true that by our law there is a higher standard of proof in criminal cases than in civil cases, but this is subject to the qualification that there is no absolute standard in either case. In criminal cases the charge must be proved beyond reasonable doubt, but there may be degrees of proof within that standard. Many great judges have said that, in proportion as the crime is enormous, so ought the proof to be clear. So also in civil cases. The case may be proved by a preponderance of probability, but there may be degrees of probability within that standard. The degree depends on the subject-matter. A civil court, when considering a charge of fraud, will naturally require a higher degree of probability than that which it would require if considering whether negligence were established. It does not adopt so high a degree as a criminal court, even when it is considering a charge of a criminal nature, but still it does require a degree of probability which is commensurate with the occasion. [Emphasis in original]

[442] Lord Denning's analysis was approved and applied by Chief Justice Laskin in *Continental Insurance Co. v. Dalton Cartage Co. et al.*, [1982] 1 S.C.R. 164, 40 N.R. 235. Immediately after quoting the extract from Denning, L.J.'s, judgment in *Bater, supra*, the Chief Justice said, at p. 171:

> I do not regard such an approach as a departure from a standard of proof based on a balance of probabilities nor as supporting a shifting standard. The question in all civil cases is what evidence with what weight that is accorded to it will move the court to conclude that proof on a balance of probabilities has been established.

[443] In his essay on "The Judge as Juror", Lord Bingham also discusses probability, that is to say, "that one thing may be regarded as more likely to have happened than another, with the result that the judge will reject the evidence in favour of the less likely." At p. 13 he cautions against the automatic dismissal of the unlikely story:

> In choosing between witnesses on the basis of probability, a judge must of course bear in mind that the improbable account may nonetheless be the true one. The improbable is, by definition, as I think Lord Devlin once observed, that which may happen, and obvious injustice could result if a story told in evidence were too readily rejected simply because it was bizarre, surprising or unprecedented....

[444] Also to be considered are the comments, albeit in the context of a criminal case, of Best J. in *R. v. Burdett* (1820), [1814-23] All E.R. Rep. 80 (Eng. K.B.) at p. 84:

> It has been said that there is to be no presumption in criminal cases. Nothing is so dangerous as stating general abstract principles. We are not to presume without proof. We are not to imagine guilt, where there is no evidence to raise the presumption. But when one or more things are proved from which our experience enables us to ascertain that another, not proved, must have happened, we presume that it did happen as well in criminal as in civil cases. Nor is it necessary that the fact not proved should be established by irrefragable inference. It is enough if its existence be highly probable, particularly if the opposite party has it in his power to rebut it by evidence and yet offers none, for then we have something like an admission that the presumption is just. It has been solemnly decided, that there is no difference between the rules of evidence in civil and criminal cases. If the rules of evidence prescribe the best course to get at truth, they must be and are the same in all cases, and in all civilised countries. There is scarcely a criminal case, from the highest down to the lowest, in which courts of justice do not act upon this principle.
>
> LORD MANSFIELD, in the Douglas case, gives the reason for this:
>
> As it seldom happens that absolute certainty can be obtained in human affairs, therefore, reason and public utility require that judges and all mankind, in forming their opinions of the truth of facts, should be regulated by the superior number of probabilities on one side and on the other.

[445] See also *R. v. Atkinson* (1866), 17 U.C.C.P. 295 (U.C. C.P.), at pp. 303 -304 and *R. v. Nerlich* (1915), 34 O.L.R. 298 (Ont. C.A.), at pp. 313-314.

Destruction of Evidence and Shifting of the Onus

[446] The plaintiffs say their ability to prove what the substance in their home was, and what effect it had on their health, was frustrated by Mr. Hay's failure to conduct a proper investigation. They say he did not take pictures, keep notes of meetings with the plaintiffs, obtain statements or attempt to identify the circumstances surrounding the loss. They also claim that he "actively destroyed evidence that had been collected, including the best examples of staining on clothing, materials that were saturated with substances, etc. according to Mike [Robicheau's] evidence." The plaintiffs say Mr. Hay's alleged failures to have the home "properly tested" or to preserve evidence, has prevented the identification of the substance, thus making treatment more difficult, and has prevented them from proving what occurred on September 20th, 1991. They say the result is a shift of the onus to Mr. Hay and vicariously to Wellington to rebut the presumption of negligence, as in *Lindsay v. Davidson*, (1911), I W.W.R. 125, 1911 CarswellSask 61 (Sask. S.C. *en banc*).

[447] The plaintiffs also seek an adverse inference that Mr. Hay failed to "preserve his recollection" because the plaintiffs' account is accurate, and "had he made accurate notes that would help the Plaintiffs."

[448] The defendants submit, in reference to the claim that Mr. Hay “actively destroyed evidence, that this is a mischaracterization of the evidence." They note that he denied destroying any samples of clothing or authorizing the destruction of any such samples.

[449] There is no evidence that Mr. Hay destroyed the clothing given to him by Ms. Tingley and which he delivered to Mr. Robicheau for testing. Mr. Robicheau testified that he received the clothing from Mr. Hay but was unable to indicate what happened to it after the testing. Although he testified that samples would not be destroyed without authorization from the owner, he could not say whether there was any such authorization, or in fact what happened to the clothing. This is not evidence that Mr. Hay either destroyed the clothing or authorized its destruction. Such a conclusion would be nothing more than speculation.

[450] Plaintiffs counsel is not correct when he says the testing by Mr. Robicheau found that the "materials were saturated with substances”. What he did find, on one of the pieces of clothing, is a substance that he said was likely urine. He said nothing more.

[451] What is also clear is that Ms. Tingley testified to having destroyed a number of examples of materials which she said supported her allegation a toxic chemical had been spread in the house. There was, for instance, a grey powder which she had taken from inside the home and put in a vial and transported in her vehicle for some time, and which she eventually threw out. She said she did not mention this powder to the RCMP, nor did she offer it to Mr. Hay. There was also a picture that she took from her daughter's bedroom and brought to Dr. Chatt, which she later threw out, as well as two pillows, originally taken from the master bedroom, which she said had disintegrated after cleaning by James Proper Care. There were other examples such as the materials returned by the RCMP following their seizure by Staff Sgt. Marando, that she did not retain. There was also the taping over of the suggested death threat she received on her phone in Sydney.

[452] In the circumstances I would not draw an adverse inference from the failure of Ms. Tingley to produce the various samples, nor am I prepared to do so in

respect of Mr. Hay's failure to take photographs or make notes of every meeting with any of the plaintiffs. I am also not prepared to conclude that any additional notes of meetings or photographs by Mr. Hay would demonstrate anything relevant to what occurred in the house or its aftereffects. What was not produced at trial is simply not evidence. My conclusions are based on the evidence at trial and not on what the parties say would have been the evidence if not for omissions or commissions by the other party. There were meetings at which Mr. Hay did not take notes and it is clear he did not take photographs of the interior of the house or of any alleged samples of staining or the dispersal of chemicals within the home. I make no inference as to what his notes would have said, if he had made them, or what his photographs would have shown, if he had taken them. In respect to Ms. Tingley, I draw no adverse inference from her failure to produce the various samples which she says showed the dispersal of a substance, or substances, in her home. Similarly however, I make no inference as to what these samples would have shown other than as was reported by others who tested them and made reports, or testified, such as Mr. Robicheau, Mr. MacMullin, Ms. Holzbecher of the RCMP crime lab and Dr. Chatt.

[453] Counsel for the plaintiffs references *Lindsay v. Davidson, supra,* a decision of the Saskatchewan Supreme Court, *en banc*. The plaintiff was a carpenter in the employ of the defendant builder. At the direction of the defendant he went on a scaffold to do some work. The scaffold fell and the plaintiff was injured. Although agreeing in the result, two sets of reasons were filed, each concurred in by a colleague on the four member panel of the Court. C. J. Wetmore, concurred in by Johnstone J., held that the trial Judge was warranted in reaching the conclusion that the "construction of the scaffold was bad and negligent" and was the cause of the accident. There were "acts of direct negligence" by employees of the defendant, other than the plaintiff.

[454] Newlands, J., in reasons read and concurred in by Brown, J., also dismissed the appeal. Prior to his conclusion that the trial judge's finding that "there was negligence on the part of the plaintiffs *(sic)* employees other than the plaintiff in the construction of the scaffold, and that such negligence was the cause of the injury which the plaintiff sustained," he observed:

> ...The learned trial Judge held that the scaffold collapsed when the plaintiff walked across it, "because one of the cleats nailed to the house for the purpose of supporting the scaffold became split from top to bottom, and the part that supported the scaffold came away from the house." This broken cleat was taken home by the defendant and destroyed. This made it impossible for the

> plaintiff to show what caused the accident, and therefore shifted the onus of proof to the defendant. *Beven on Negligence*, at p. 125, says: "The onus of proof may be shifted by acts of the one party rendering the discharge of the onus normally resting on the other party more difficult, as in *Rooney v. Allans*, 10 Rettie, 1224, where the injury sued on was caused by the breaking of a chain. In the ordinary course the plaintiff would have been put to show negligence. But the defendant's superintendent flung the broken piece into the Clyde. 'This very indiscreet act,' said Lord Young, 'shifts the onus of proving its (the chain's) condition upon the defenders, whose chief official thus excluded the possibility of a scientific examination.'"...

[455] The circumstance referenced by Newlands J., where the defendant destroyed evidence, thereby denying the plaintiff the chance to have it scientifically examined, is not here present. As already noted, there is no evidence that Mr. Hay destroyed any evidence, or instructed anyone else - such as Mr. Robicheau - to destroy the clothing he had tested and found to contain a substance that was most probably urine. There is also the fact the clothing was tested, albeit by a company selected by Mr. Hay. Thirdly, the clothing in question was but one example of clothing Ms. Tingley said had been stained by the intruders, rather than being the only example of such staining. Fourthly, on the evidence, Ms. Tingley herself destroyed a number of samples of alleged staining, some of which had been tested and found to contain no evidence of a chemical toxin while others were never tested.

[456] Neither *Lindsay v. Davidson,supra*, nor *Rooney v. Allans, supra*, have any application in the present instance.

Failure to Call Material Witnesses

[457] The defendants observe that the failure to call a material witness, or relevant evidence, can result in the court drawing an adverse inference as to the content of such testimony or evidence had it been given. They refer to the decision of Justice Cromwell in *Davison v. Nova Scotia Government Employees Union*, 2005 NSCA 51, at para 73, citing Sopinka et al., *Law of Evidence in Canada*, 2d Cdn. (Toronto: Butterworths, 1999) at p. 297:

> In civil cases, an unfavourable inference can be drawn when, in the absence of an explanation, a party litigant does not testify, or fails to provide affidavit evidence on an application, or fails to call a witness who would have knowledge of the facts and would be assumed to be willing to assist that party. In the same vein, an adverse inference may be drawn against a party who does not call a material witness over whom he or she has exclusive control and does not explain it away. Such failure amounts to an implied admission that the evidence of the absent witness would be contrary to the party's case, or at least would not support it.

[458] Justice Cromwell observed that the inference is permissive, not mandatory, and should only be drawn when it is warranted in all the surrounding circumstances. Counsel also acknowledges, referencing Justice Pugsley in *Can. Trustco v. Co-op General* (1997), 163 N.S.R. (2d) 241 (CA), at paras. 29-38, that an adverse inference will not be drawn where the proponent has not diligently used the broad powers available to discover the witness or evidence that they fault the other party for not bringing before the court.

[459] Counsel also references, in respect to medical witnesses, the statement by Justice Davey in *Barker v. McQuahe et al (*1964), 49 W.W.R. 685 (B.C.C.A.), at para 13, that "a plaintiff who seeks damages for personal injuries ought to call all doctors who attended him in respect of any important aspect of the matters that are in dispute, or explain why he does not do so."

[460] Counsel observes that Justice Coffin in *Robertson v. Halley* (1972), 3 N.S.R. (2d) 692 (C.A.) at para 24, stated this was a "correct principle of law". Counsel acknowledges that " . . . in order for an adverse inference to be drawn, the particular doctor's testimony must be necessary, meaning it must add something to the testimony given by any other witnesses."

[461] The submission by the defendants continues:

> The Supreme Court of Canada commented on adverse inferences [in] *Levesque v. Comeau*, [1970] S.C.R. 1010. In that case, the plaintiff alleged that her hearing was seriously impaired as a result of a traffic accident. The injury did not manifest itself until two months after the accident. The issue was whether or not the accident was the cause of the hearing loss. At trial, Dickson J. drew an adverse inference from the plaintiff's decision to call only one of the many doctors who had treated her. This left gaps in the story. The adverse inference was upheld by the Supreme Court. At para. 6 Pigeon J. said:
>
> > [The plaintiff's] expert examined her for the first time more than a year after the accident, and after she had consulted several doctors and undergone different examinations in the meantime. She alone could bring before the Court the evidence of those facts and she failed to do it. In my opinion, the rule to be applied in such circumstances is that a Court must presume that such evidence would adversely affect her case. [...] Under the circumstances, her testimony and that of her husband respecting her good state of health before the accident could properly be considered insufficient evidence for the purpose of excluding the other possible causes of the deafness.

[462] The defendants go on to argue:

> There are many similarities between *Levesque* and the case at bar. The Plaintiffs in this case left significant gaps in medical evidence. The expert and medical witnesses they did call did not see

> them contemporaneously with the alleged adverse events. They failed to call any medical witnesses to speak to their medical history prior to September 1991. The medical records uncovered by document requests from the Defendants and admissions from the Plaintiffs themselves provide the court with evidence that had they been called, contemporaneous medical witnesses would not have been helpful to the Plaintiffs.

[463] In reference to the plaintiffs' claims that there had been changes of health following their alleged chemical exposure, counsel observes that Dr. Greg Roy was the family physician for Ms. Tingley and her children for many years prior to September, 1991, and for eight months subsequent, at which time they switched to Dr. Deagle. Counsel suggests that if any physician could speak about any change in their health it would be Dr. Roy. She suggests that Dr. Roy's records for both Todd Smith and Kelli Smith do not show such a change in health and, in fact, supports many other explanations for the difficulties they later experienced in school. Dr. Roy did not testify.

[464] In respect to Ms. Burton, Dr. Virick had been her family physician for 20 years prior to September 1991. Although Dr. Virick's file was referenced during the course of Ms. Burton's testimony, he did not testify. Counsel says his file "suggests quite strongly that Ms. Burton's problems pre-existed the alleged exposure." Counsel's submission continues:

> ...One can only conclude that his evidence would have been harmful to the Plaintiffs' case. The same can be said for Dr. Mann, who saw Ms. Burton in February of 1992 and Dr. Jones who saw Ms. Burton in 1990 and 1991.

[465] Counsel also notes the failure of the plaintiffs to call Dr. Marie Therese O'Neill, a psychiatrist, who apparently treated Kelli Smith in 2001. Counsel also highlights, in written submissions, other suggested gaps in the medical evidence relating to the plaintiffs, particularly Ms. Tingley and Ms. Burton. In respect to the plaintiffs, she notes the absence of any of the IWK nurses or the two doctors who were involved in treating Todd Smith during his visit to the emergency department at the IWK in September 1991. Referencing conflict between the IWK and Poison Control records with the version of events testified to by the plaintiffs, she suggests that if the authors of the notes would have been helpful to the plaintiffs, it would be assumed they would be called as witnesses.

[466] Finally, counsel notes the absence of Dr. Deagle, the first physician to diagnose Ms. Tingley and Ms. Burton with environmental illness. Counsel for the plaintiffs has suggested that the first diagnosis was by Dr. Zinman. However I am

not satisfied, on the records, and in the absence of Dr. Zinman testifying, that she actually diagnosed an environmental illness, as opposed to restating what she had been told by the plaintiffs was the cause of Mr. Smith's difficulties. It was suggested that the absence of Dr. Deagle was due to the plaintiffs' financial limitations. However, the plaintiffs were prepared to call Dr. Lawen and Dr. Andrews, who, the defendants suggest, "offered no useful information whatsoever to their case." The defendants suggest that if Dr. Deagle was as supportive a witness as the plaintiffs allege, he would have been called before they used their budget in calling Drs. Lawen and Andrews. Not noted by counsel, but to similar effect, is the non-attendance by Professor Lee. Plaintiffs' counsel indicated that he had arranged for him to travel from Alberta to attend at trial and that it was only shortly before his scheduled attendance that he learned, because of his health and the stress of testifying in Nova Scotia, that he would not be able to attend. Presumably the plaintiffs had budgeted for Prof. Lee's attendance. Unexplained is why the resources previously allocated for Prof. Lee could not have been used for Dr. Deagle or, indeed, if Dr. Zinman was actually the first to diagnose an environmental illness, for her attendance. Neither Dr. Zinman nor Dr. Deagle were called as witnesses. The defendants reference other potential witnesses that the plaintiffs could have called to explain suggested inconsistencies in their evidence or changes in their health following the exposure.

[467] Clearly there are gaps in the evidence, and witnesses who seem likely to have had relevant testimony are absent. On the other hand there are also witnesses that the defendants failed to call, including two experts whose reports were filed but who were not called to testify. Does the court speculate that these experts would not be supportive of the defendants' position, but rather, either on direct or cross-examination, would provide evidence supporting the plaintiffs? In respect to one of the experts, suggested to have experience in "air quality assessments", perhaps the defendants would suggest that his evidence was satisfied by the testimony of Mr. Robicheau in this regard. Mr. Robicheau did not provide a report on "air quality assessments". Consequently he could not be called as an expert for that purpose. However he was the subject of severe criticism by Prof. Lee for his failure to conduct an "air quality assessment" and he was qualified, over the objections of plaintiffs' counsel, to give opinion evidence on why he did not conduct an "air quality assessment" in response to the criticisms levied by Prof. Lee. This is not the same as tendering a report of an expert on "air quality assessments", with the author testifying in support of their report.

[468] As with the absence of a number of witnesses the plaintiffs could have called, I am not prepared to speculate as to why the defendants did not call the two experts whose reports were filed, but who did not testify. As a consequence their reports are not part of the trial record and are only referenced to the extent other witnesses used them or referenced them, in giving their testimony or providing their reports. In respect to the latter Professor Lee provided his comments on the two experts' reports, and they form part of the record.

[469] As with the submissions in respect to the destruction of evidence, this case will be determined on the evidence presented and not on speculations as to what witnesses who did not testify might have said either in support of, or contrary to, the positions of either of the parties. I have considered the comments from the cases, as well as Sopinka et al in *The Law of Evidence*, supra. Nevertheless, in view of the observation by Justice Cromwell in *Davison*, *supra*, that the inference is "permissive and not mandatory", I draw no adverse inferences either for or against the plaintiffs or the defendants on account of their failure to call any of these potential witnesses.

Contradictions and Credibility

[470] As is to be expected, there are numerous contradictions in the evidence of many of the witnesses testifying about events dating as far back as 1991. There is, for example, the suggestion by the defendants that Ms. Tingley was in the home when the video was taken in 1994 notwithstanding her evidence that she remained outside. There is the suggestion by plaintiffs' counsel that there is an inconsistency in the evidence of Brian James as to whether he saw stains on the ceiling of the house. It might be argued that his evidence that he did see any stains on the ceilings related to the time when he was cleaning the home, while his reference to observing stains was to the watermarks he discussed with Ms. Strong during a later visit. In any event, his evidence of his observations was different. Also there is the evidence of Mr. Hay on how he obtained the clothing samples that he delivered to Nova Scotia Research Foundation which is to be contrasted with the evidence of Ms. Tingley. Mr. Hay said Ms. Tingley delivered the clothing to his office, while Ms. Tingley said Mr. Hay picked it up. Additionally there is the contradiction in the evidence of Mr. Hay and Mr. Robicheau as to when Mr. Hay delivered the samples to Mr. Robicheau at the Nova Scotia Research Foundation and how long he had them before he made his initial oral report and later the one page written report. There are many others. Most of these small-scale

contradictions are, in my view, not particularly helpful in determining the reliability, and therefore the credibility, of the witnesses.

[471] The more significant contradictions and inconsistencies relate to testimony that is not so much a recall of some particular detail, but rather is a statement of what the witness said, or did, or how they were affected by the events of September 1991 and following. Whether Ms. Tingley told Mr. Hay or any police officer about the death threat is not, in itself, significant on the question of whether the plaintiffs should succeed on either cause of action, but is significant to the extent that it shows further contradictions between the evidence of Ms. Tingley and those with whom she dealt as to what she said or did not say, and what she did or did not do. The police officers denied that Ms. Tingley ever communicated to them that she had received a death threat, and added that if she had, a reference to it would have appeared in the RCMP files (other than Cst. Rice, who said on discovery that "it does ring a bell, something about threats"). Mr. Hay denied that in 1991, at any time, he was told by Ms. Tingley that she had received a death threat and no such information was referenced in any of his file notes of his discussions with Ms. Tingley. The reference to the death threat is significant because the plaintiffs sought to make it so. Its effect on the credibility and reliability of Ms. Tingley's evidence only occurs because of this.

[472] Although not necessarily a contradiction or an inconsistency, troubling in respect to the evidence of all four plaintiffs is the extent to which Dr. Fox, in particular, was not informed of their prior medical conditions when he was diagnosing and treating them for what he called Multiple Chemical Sensitivity. Notwithstanding the extensive re-examination of Dr. Fox by plaintiffs' counsel, it is clear he was unaware of much of their prior medical history and assumed in some instances, and was led to believe in others, that the health complaints they were making to him had only arisen after the break in of September 1991. During cross examination, at least, the information about their medical histories caused him, in each instance, to respond that if he had been aware of the information brought to his attention by defendant's counsel, he would not have diagnosed any of the plaintiffs with multiple chemical sensitivity. Admittedly, on re-examination, he stated to plaintiffs' counsel that he believed the plaintiffs, and in particular Ms. Tingley, had suffered an exposure to a chemical toxin or toxins in her home.

[473] Counsel for the plaintiffs asserts that there are inconsistencies and contradictions in the evidence of many of the witnesses, including the defendants'

witnesses, Mr. Hay and Ms. Strong. The plaintiffs effectively suggest that the Court should regard any inconsistencies and contradictions by the plaintiffs as to be expected, given the long period that elapsed between the events in question and their testimony in court. This view ignores the nature of the inconsistencies and contradictions, the source of the contrary evidence, whether it be the witnesses' own prior statement or record, or notes or records by others, including nurses, doctors and police, some of whom testified and some of which is in record only by the filing of their notes, documents and records.

[474] Particularly striking in the evidence of Ms. Tingley is the nature, number and content of the inconsistencies. Although she testified for over 20 days, in reference to events 17 to 18 years previously, and in the case of her health as a child and young woman, even further in the past, she contradicted her evidence given on discoveries some 10 years earlier, and therefore considerably closer in proximity to the events about which she was testifying. She also described notes of various doctors as incorrect, and alleged that various statements made contemporaneously to the events, by police and others, in some instances were wrong. The only suggested explanation for the errors in her discoveries was that she was ill at the time, or that she may have misunderstood the question and, in respect to the doctors and nurses, that many of their notations were wrong. Her only suggestion in respect to the police notes, and where the officers testified to similar effect in their oral testimony, was that the police did not take her complaints seriously.

[475] What is clear, in considering all the evidence, is that apart from their family and friends, none of the remaining witnesses corroborate the plaintiffs' evidence as to the extent of the visible contamination in the house. Particularly significant is the evidence of the various RCMP officers denying allegations made by Ms. Tingley. There were also significant contradictions and or inconsistencies between the plaintiffs' evidence and that of many of the medical professionals and nurses who treated them. Admittedly, note takers make errors. However, in many of the instances of inconsistency and contradiction, the recorded notes are more credible and consistent with the broader circumstances than the denials. The inconsistency between the plaintiffs' evidence at trial and their earlier testimony at discovery or in written statements cannot be adequately explained by saying they were not feeling well or, in effect, that they did not take the discovery seriously because they did not want to admit they were ill. It is not for the Plaintiffs to use this as a rationalization as to why their earlier versions of events should be discarded in

favour of their evidence at trial. Such rationalizations and speculations, seeking to explain inconsistencies and contradictions did not reflect the strength of the evidence presented at trial, but highlighted its deficiencies. Although, there were also deficiencies in the evidence presented by the defendants, in the final analysis, the burden or onus is on the plaintiffs. The defendants are not required to prove they are not responsible for any loss and injury suffered by the plaintiffs; rather it is on the plaintiff to establish that any loss or injury they suffered is the legal responsibility of the defendants.

[476] Inconsistencies and contradictions are, of themselves, not necessarily fatal to a witness or group of witnesses' credibility. However, where the evidence is only "consistent as to its inconsistencies", it is difficult, if not impossible, to place fact finding weight on it. Nor is it sufficient to say the defendants should have made better records, made more notes, or taken photographs to assist the plaintiffs in meeting their burden. The defendants are not required to establish anything. For as long as the common law has existed, the burden of establishing a fact or proposition, with minor exceptions not here relevant, is on the one asserting it. Although the long delay in this matter proceeding to trial may, in part, explain some of the inconsistencies, contradictions, and deficiencies in the evidence, and, particularly the evidence of the plaintiffs, the party bearing an onus or burden is still required to tender sufficient evidence to satisfy the onus. In addition, and although the passage of time may account for some of the inconsistencies, they occurred with such regularity as to suggest other conclusions.

[477] In assessing the reliability of the evidence by the witnesses testifying to the events and circumstances surrounding the break and enter, as well as to the impact and effects, particularly the health effects on the plaintiffs, it is necessary to examine their evidence, the evidence of the defendants' employees involved and the evidence of others who became involved, such as police officers. In considering testimony at trial, it is necessary to view it in the context of all the other evidence, including the oral testimony of other witnesses and the documentary evidence filed during the course of the trial. Also essential is to consider the consistency of the witnesses’evidence, both in respect to what they have said during their testimony in court, as well as to what they may have said on discovery and what others have suggested they said or did, either by oral testimony or by reference to notes of what the witness is reported to have said to third parties.

[478] Although a witness may be biassed, by virtue of having an interest in the outcome of the trial, either directly as a party or indirectly as an employee or contractor of a party, this does not mean their evidence is necessarily unreliable or incorrect. Similarly, because some witnesses do not have any known interest in the outcome does not mean their evidence is necessarily reliable, when judged in the context of all the evidence.

[479] It is not surprising that discrepancies and inconsistencies would be present in the evidence of witnesses describing events from 17 or 18 years earlier. Also to be expected is the presence of errors in notes or records made by doctors who treated or assessed one or more of the plaintiffs, as well as in notes made by police officers and other involved persons, such as insurance adjusters. The circumstances of the note taking, its proximity in time to the event or statement being recorded, the apparent experience of the person in note taking, where it occurred, the testimony of the person who made the note, whether in court or on a discovery examination, their recollections of the event or statement recorded in the note, and whether they had recall independent of the note or record, must all be considered in weighing the reliability of the note, document or record as well as the testimony of other witnesses.

[480] The defendants submit that there is "absolutely no credible evidence" supporting the plaintiffs' assertion that a chemical or toxin was spread in the house during the break-in. The plaintiffs submit, in response, that by this reasoning "the wet dresser, powders, sprays on the wall, were all benign and merely placed there by the thieves for apparently no reason and without any malice or intent towards Pat Tingley or her family." They say the evidence indicates that none of this material was present before the break-in, and that it was present afterwards. The defendants respond that there is "no test data, scientific, nor objective evidence that substantiates [the plaintiffs'] claim that toxic chemicals were in their house at any time. The only evidence of that nature submitted by the Plaintiffs were the blood and adipose tissue lab reports from AccuChem Labs and sample testing results by Craig MacMullin of Fenwick Labs."

[481] After the break-in various individuals, at various times, observed wet clothing, wetness on the back of a dresser, powder, a powdery stain on a piece of clothing, and stains on carpets, walls and ceilings. There was a great deal of evidence by witnesses as to what they found or observed, as well as what they did

not find or observe. Additionally, some witnesses reported smells, while others said they detected no smells while in the house.

[482] There is evidence that after the break-in there were substances observed that would be characterized as chemicals. The issue is whether substances were dispersed in the house that were toxic or that could have caused, or contributed to, any damages allegedly suffered by the plaintiffs, and whether the defendants made negligent or fraudulent representations to the plaintiffs about the consequent state of the house. Whether the plaintiffs suffer from Multiple Chemical Sensitivity is not the determining issue.

[483] The plaintiffs refer to the evidence of staining, and in some instances stains bleeding through the paint as well as the evidence of Prof. Lee to the effect that the staining he observed in the video on the walls and ceilings were chemical stains. Counsel also references what he suggests were the changes in health associated with the substances and "the medical records showing subsequent off gassing, lesions, seizures, etc." Counsel also refers to the evidence that the off gassing by the plaintiffs produced a chemical smell that could not be faked and that limited testing, unspecified, by Ms. Tingley confirmed the "presence of substances that were likely the carrier for the actual toxic chemicals, which were never identified."

[484] For reasons already reviewed I place little weight on the reports prepared by Prof. Lee. In his report of September 7, 2004 he stated: “From the video taken on May 11, 1994, there was considerable evidence of chemicals staining throughout the entire house including the walls, ceilings, bulkheads, carpeting, around light fixtures, at the junction between the walls and ceiling, etc.” This statement (as I have already observed) was made notwithstanding the fact that, by letter dated September 2, 2004, addressed to counsel for the plaintiffs, he wrote: “ . . . The photographs and video tape show some staining that can be made from many other causes. This will put me at a disadvantage in making a good case. . . I do not want to mislead you into thinking that I can provide substantive arguments to help your case. As it stands, the best I can do is conjecture based on secondhand reports . . .”

[485] Professor Lee’s explanation, provided in a discovery, is simply not credible. He suggested that the poor quality of the video made it difficult to view, saying he gets "seasick" looking at handheld videos. He said he reviewed the video once, when he received it, and viewing it made him "dizzy". He said he thought he played it back "a little bit" looking at certain spots. He could not recall which

particular stain spots he had looked more closely at, in rewinding the video. How, viewing certain spots on the video, a second or even a third time, would enable him to conclude that the "some staining" he initially observed was in fact "considerable evidence of chemicals staining throughout the house . . ." is not satisfactorily explained. This is simply another example demonstrating why I place little weight on the opinions expressed by Prof. Lee in his various reports.

[486] In his submission counsel suggests that the defendants ignored Dr. Jean Gray's report and trial evidence where she confirmed that she did not have any doubt that Ms. Tingley had a significant toxic exposure but that it would be difficult to confirm. Dr. Gray was the only qualified toxicologist who gave evidence at trial. Although, as observed by counsel for the plaintiffs, she testified that she did not have any doubt that Ms. Tingley had suffered "a significant toxic exposure" in addition to stating "it would be very difficult to identify hard laboratory data that would support these claims", she responded to defence counsel that she did not diagnose that Ms. Tingley had suffered a toxic exposure. She was asked to confirm, or exclude, the possibility of a toxic exposure. The reference in one of the records to "insecticide exposure" was to a working diagnosis. She had not made the diagnosis herself. She did add that there was nothing in the information and story provided by Ms. Tingley that caused her any doubt as to the accuracy of the diagnosis. She replied to defence counsel that her tests did not exclude, nor confirm, the possibility of a toxic exposure.

[487] In respect to the xylenes and trimethylibenzenes reported in the AccuChem lab reports, she said they are very common solvents and are ubiquitous in the environment. On direct she said they were minimally elevated and she would see them as carriers of potential toxins rather than as the actual toxins. She stated that both the AccuChem and Fenwick lab reports, although of interest, were sufficiently removed from the supposed toxic exposure as not to permit a conclusion as to whether there had, or had not, been a toxic exposure. She said she believed she had communicated this conclusion to Ms. Tingley.

[488] Dr. Gray’s statement that, from the history she received, she had no doubt there was a toxic exposure, was based on what Ms. Tingley had told her. The lab results were normal. The physical exam did not indicate any symptoms. She relied on the patient history. She added that if it was shown the symptoms had begun at times other than those of which she was informed, this might indicate something different. She said she was not able to demonstrate "objectively" that

there had been an exposure. She did conclude, however, that the chemicals identified in the AccuChem reports were not the ones causing the problems.

[489] In respect to Ms. Burton, Dr. Gray said her test results were relatively normal and she could not say if she had experienced a toxic exposure. Based on the lab results, and her physical examination, she felt Ms. Burton should be referred to a neurologist, and she arranged for her to see one.

[490] Dr. Fox testified that in his diagnosis he placed no weight on the AccuChem and Fenwick labs reports. He also confirmed that he was not aware of any objective evidence that a toxic chemical was present in the home.

[491] Craig MacMullin, the author of the Fenwick lab reports, acknowledged to defence counsel that based on his analysis he could not reach a conclusion on whether Ms. Tingley or her children were exposed to chemicals in their house.

[492] The defendants, referencing the report of Nova Scotia Research Foundation to the effect that a substance found on a piece of clothing provided by Ms. Tingley was likely urine, submit that "the only substance, if anything, dispersed in the Smith home during the break and enter was urine." With such a suggestion I cannot concur. There was evidence of many witnesses, including not only the plaintiffs their friends and relatives, but other observers, including Mr. Hay, and likely Mr. Robichau, as well as members of the RCMP, who observed substances in the Smith home at various times following the break-in. In the absence of any evidence suggesting that these substances were deposited, either before the break-in or subsequent to the break-in, it cannot be said that the only substance, if any, deposited in the Smith home during the break-in was urine. Admittedly some of the persons who visited the house, testified they neither saw evidence of staining nor smelled anything unusual. Constable Gillis, who was the first police officer on the scene, testified that he walked through the entire house and did not smell or see anything unusual. Staff Sgt. Marando, then Constable Marando, who attended with Donna MacKay, a friend of Ms. Tingley's, testified to seizing certain items suggested by Ms. McKay but indicated he did not see anything on any of the items that he seized and none of them were wet. This however is to be contrasted with the evidence of Mr. Hay, who acknowledged that he observed wetness on the back of the dresser, which in fact was one of the items seized by Staff Sgt. Marando. Presumably the back of the dresser seized by Sgt. Marando had dried by the time he took it.

[493] Constable Rice, in his discovery, on being questioned by counsel for the defendants he replied that he looked at some clothing that Ms. Tingley was pointing out, on which she said she saw a yellow substance, but he said he could not see it. He also said he could not smell "a nicotine smell" as had been suggested by Ms. Tingley.

[494] Ms. Strong testified that when she attended at the home with Mr. Hay in November 1991she observed a cloudy substance on a window in Kelli Smith's room. She said she made no suggestions as to what it might have been. She also said she did not recall seeing any other stains on ceilings, carpets or walls, nor did she observe any strange odours in the house.

[495] Although I am satisfied that following the break-in there were substances left in the home that had not been there prior to the break in, I am equally satisfied that on the evidence there is no test data or scientific or objective evidence to substantiate that any of these substances were toxic chemicals or substances that could contribute to any illnesses which the plaintiffs now experience. Simply because intruders may have left a substance does not mean the substance was toxic. The testing that was done, whether by the RCMP crime lab, Fenwick laboratories, AccuChem, Dr. Chatt, and the observations and testing by Dr. Gray, does not confirm that there was a toxic chemical or chemicals in the home, from which the plaintiffs suffered a toxic exposure. Although the evidence does not exclude the possibility of a toxic chemical, or chemicals, having been left in the home, the onus is on the plaintiffs to establish, on the balance of probabilities, that toxic chemicals were sprayed or dispersed in the Smith home, and the plaintiffs have not met that burden.

[496] I am satisfied that the plaintiffs have not established that any statements about the state of the house made by the defendants were either negligently made or fraudulently made. I am, in particular, not satisfied that Mr. Hay ever told the plaintiffs that air quality testing had been done. More broadly, the plaintiffs have not established that any damage they have suffered was caused by anything that was spread in the house in September 1991.

[497] In her written post trial submission, counsel for the defendants states their position to be that not only was the house safe but there were no chemicals. The finding that the plaintiffs have not established, on a balance of probabilities, the

elements of negligent misrepresentation and equitable fraud does not necessarily constitute either a finding that the house was safe or that there were no chemicals. The onus was on the plaintiffs to establish that the house was not safe and that there were chemicals present following the break-in. In finding that the plaintiffs have failed to do so, I do not necessarily find that the contrary has been established. In fact, Mr. Robicheau the expert retained by the defendants never said there were no dangerous chemicals in the house. He said that would impossible to guarantee. All that he could say was that there was nothing dangerous that he found during his visit to the home. He did not find anything that he viewed as being unsafe. The defendants have not established, on a balance of probabilities, based on the evidence presented during the trial, that the house was safe or that there were no chemicals left by the intruder or intruders involved in the break-in. The issue is whether the plaintiffs have satisfied their burden, not whether the defendants have established "that the house was safe and there were no chemicals."

[498] A significant amount of evidence, both oral and documentary, was given in respect to whether the plaintiffs have suffered Multiple Chemical Sensitivity. Dr. Fox and Dr. Beresford gave evidence of their approach to Multiple Chemical Sensitivities and their criteria for determining whether a patient is so afflicted. They both indicated they disagreed with the definition and criteria used by Dr. Cullen, describing his definition as more restrictive and limiting. Whether the plaintiffs are multiple chemically sensitive is not the issue in this proceeding. The determination of what is required to meet the criteria for Multiple Chemical Sensitivity is a medical issue, not a legal one. In respect to the two causes of action, and the element of causation, the issue is whether anything spread or sprayed in the home caused or substantially contributed to environmental sensitivity to any or all of the plaintiffs. It is not whether any, or all, of the plaintiffs meet the criteria for Multiple Chemical Sensitivity, either under the definition created by Dr. Cullen or the criteria used by Dr. Beresford or Dr. Fox. The latter are medical issues and best left to the medical profession to resolve. It is unnecessary to resolve them in this lawsuit.

CONCLUSION ON LIABILITY

Spreading of Toxins or Chemicals

[499] The plaintiffs have not established on a balance of probabilities that chemical toxins were sprayed or spread in the home at 150 Silestria Drive in September 1991. Consequently, they have not established either a negligent misrepresentation or equitable fraud against either or both defendants.

[500] Although Ms. Tingley tested a number of items, there was no objective or scientific evidence a chemical toxin was ever spread in her home. Additional alleged examples that she had in her possession, she destroyed. Dr. Lee, on whom the plaintiffs rely, is simply not credible.

[501] Although the plaintiffs apparently had limited resources, they chose not to use them to conduct any additional tests other than those, the results of which were tendered in evidence and which did not, on the evidence of Dr. Gray and confirmed by Dr. Cullen, demonstrate the presence of a chemical toxin or toxins. Both Dr. Gray and Dr. Cullen stated what was found was to be expected, and was not suggestive of a toxic substance in the quantities found that would be dangerous to the health of the plaintiffs.

The Representations

[502] Additionally, as to other of the necessary elements of both negligent misrepresentation and equitable fraud, the findings on reliability and credibility result in the plaintiffs also failing to prove some of them. Although the defendants owed, in these circumstances, a duty to Ms. Burton, in addition to the other plaintiffs, they have not proved either a negligent nor a fraudulent misrepresentation.

[503] As to the alleged misrepresentation, undoubtedly Mr. Hay said something about the home when he called to say the cleaning by James Proper Care had begun. However, his assertion that he never said the house was safe reflects what Mr. Robicheau said he was able to say, in that he did not tell Mr. Hay that the house was safe. On cross-examination Ms. Tingley acknowledged that Larry Hay never said the house was safe, only that she assumed it was safe because she also assumed he had air quality testing done as she says he promised. Mr. Hay denies making such a promise, only undertaking to look into air quality testing. Repeatedly in her evidence Ms. Tingley communicated interpretations and statements made to her that were not consistent with what she was apparently told. This was shown in some cases, through the evidence of what individuals say they

actually told her, as opposed to what she told others, or by reference to notes and records that showed Ms. Tingley was not being accurate in communicating information to others. A similar inaccuracy is more likely to have occurred in respect to what Mr. Hay actually communicated to Ms. Tingley.

[504] In respect to the alleged communication in November 1991by Mr. Hay and Ms. Strong to Ms. Tingley and Ms. Burton that the home was safe, I am similarly troubled by the content of their evidence as a whole in respect to what they, on different occasions, were saying they had been told as compared to what the records or testimony of these other persons indicated. When misinterpretations occur with some frequency it is difficult to place reliability on that witness' versions of conversations when what they say they were told is denied. Mr. Hay and Ms. Strong both denied making the statements about the house being safe attributed to them by Ms. Tingley and Ms. Burton. As noted, this is not what Mr. Robicheau says he told Mr. Hay and there is no evidence that Ms. Strong had conversations with Mr. Robicheau or anyone else so as to enable her to make such a representation.

[505] Plaintiffs' counsel refers to correspondence, one by a former counsel of the defendants and another by a senior employee of the corporate defendant. It suggests that these are repetitions of the guarantees made by Mr. Hay and Ms. Strong. Even if this correspondence would be so interpreted, it was made long after the plaintiffs were exposed to whatever is alleged to have been spread in the home. The element of reliance would therefore not be present. However, the interpretation by plaintiffs' counsel is not accurate. In the one instance the author is simply referring to the conclusion about the safety of the house as made by one of the defendants' experts, albeit one of the experts who although filing a report, did not testify. In the other instance the author only states that nothing unsafe was found in the house, a fact born out in the evidence of Mr. Robicheau.

Causation

[506] A further difficulty with the plaintiffs' position is the element of causation. Dr. Cullen, clearly an expert with extensive experience and knowledge in the area of chemical sensitivities, explained in detail why the medical information available in respect to each of the plaintiffs demonstrated that any sensitivities that they had predated September 1991, and that there was no change in any of their health symptoms following September 1991. Additionally, there is the evidence of Dr.

Fox on cross-examination, where he acknowledges that in light of the additional medical information presented to him respecting the medical conditions of the plaintiffs before and following September 1991, he would not himself have diagnosed them as multiple chemically sensitive. Although on re-examination and after further medicals were presented to him by plaintiffs' counsel, he said he believed the plaintiffs suffered from Multiple Chemical Sensitivity, it is clear that it was the stories presented to him by the plaintiffs on which he was primarily relying.

[507] A similar conclusion is evident from the testimony and opinion of Dr. Gray.

[508] The plaintiffs are ill. There is no scientific, or objective evidence, that their present health conditions were caused or contributed to by anything spread or sprayed in the house in September 1991. As such, the plaintiffs have not established either cause of action.

DAMAGES

[509] In view of the fact that the findings on liability were predominately based on findings of fact and assessments of credibility, rather than on disputed issues of law, I decline to assess damages in the alternative (see, for instance, *Caplan Builders Ltd. v. Royal Bank* (1988), 32 C.P.C. (2d) 284, 1988 CarswellBC 1328

[510] (B.C.S.C.), affirmed at 1989 CarswellBC 1337, [1989] B.C.J. No. 1074 (B.C.C.A.)).

MacAdam, J.

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