**MEMORANDUM**

To: Jan Schlictman

From: Earl McGowen

Date:

File: Woburn Interviews

Re: Interviews of Potential Clients and Witnesses

**INTRODUCTION**

 On June, 3rd 2011, the offices of Mack and Associates began interviewing potential clients and witnesses from the city of Woburn, Massachusetts. Our current clients live in Woburn and have lost children due to complications concerning childhood leukemia. It is believed that contaminants in the water supply of the city of Woburn caused these diseases. On June 3rd, 2011, our offices met with and interviewed Anne Anderson, Donna Robbins, Reverend Bruce Young, and Doctor John Truman to gather information about this potential lawsuit, and this memo captures what was learned. Anne Anderson and Donna Robbins were concerned with finding out why their children have died from leukemia, and it was explained to both clients that lawsuits are for compensation and not just getting information. Expectations were set with Anne Anderson and Donna Robbins that a lawsuit would be a long drawn-out process of medical work and potential research on the families. This memorandum will describe the facts learned at the interviews and then give recommendations based upon those facts.

**INTERVIEWS**

**1. Anne Anderson**

 During the interview Anne Anderson explained the facts surrounding the death of her son. Her children had various illnesses and were becoming sick easily. The other children recovered, but her son Jimmy did not get better and would bruise easily even though he rested in bed all day. Jimmy’s pediatrician referred Jimmy to Dr. Truman at Massachusetts General Hospital who diagnosed Jimmy with leukemia in 1999. Jimmy started a program of chemo and other drugs to put the leukemia into remission, and went into remission for three years. Jimmy never fully regained health during this period. In 2005, the leukemia came back, and another round of treatments started. Jimmy died in January of this year.

 Ms. Anderson believes there may be a connection between her son’s leukemia and the water from the wells of Woburn. The water always smelled or tasted bad, and Anne’s mother had to bring fresh water for the Andersons to drink. The water also destroyed the Andersons’ dishwasher as it corroded and fell apart. According to the notes, Anne claims the water had been unpalatable when they first moved to Woburn in 1995.

 In 1999, citizens petitioned the city and the Mayor to shut down specific wells in Woburn because of the taste and smell of the water. The city brought down the wells, but a water shortage forced the city to turn the wells on again. In September of 2009, an article surfaced in the local Woburn Daily Times about arsenic illegally dumped in a local lagoon. Prior to the article Anne had mentioned to Reverend Bruce Young her theories about a connection between the water and leukemia in Woburn. The Reverend only began to take her theories seriously after the article had been published about an arsenic dump.

 The city has always held firm that nothing was wrong with the water. Thomas Mernin, the city engineer, might be helpful in getting information about the wells. Ms. Anderson also mentioned that Donna Robbins, the Aufieros, and the Zonas might be responsive to a lawsuit.

**2. Donna Robbins**

 During the interview Donna Robbins explained that her son, Robbie, was born in July, 2008, as a perfectly healthy child but began to go downhill and had ruptured an ear drum in his first year. When he turned four, he complained of pain, and his parents took him to see a pediatrician. One doctor thought he had rheumatoid arthritis and another doctor thought his hip might be septic. Robbie had surgery on his hip that went poorly, did not solve anything, and made things worse. Donna Robbins said, "I don’t know anything about medicine, so I went along with surgery." The doctors began more treatments and tests at another facility and diagnosed Robbie with childhood leukemia in 2006. Robbie was given chemotherapy and went into remission. He relapsed a third time in 2008, which was the last time. He passed away in 2010. Donna Robbins recounted not being able to be with Robbie when he passed away, and she felt guilty for not being there. She recounted an event where Robbie became sick while buying him a wig, and the clerk grew mad at her. She became friends with Anne Anderson, whom she had regular conversations with and gathered support from. She also knew of the Aufieros, whose son had been diagnosed with leukemia.

 Reverend Bruce Young consoled Donna Robbins at the hospital and asked her about the water. Until that time, she had never thought about a connection between the water and her son’s sickness. She describes the water as “awful” and “inconsistent” since 1996, and she had to add frozen juice concentrate or her ex-husband would have to chill it to make it palatable.

 She briefly mentioned the research being done to examine leukemia cases covered by the local media and commented that the researchers contacted her but never asked about the tap water.

 Ms. Anderson would make a good witness. She has a sympathetic story and she is able to articulate this sympathy. She was able to give visual stories and show the pain of losing her child. She is believable, and there were no inconsistencies in her testimony.

**3. Reverend Bruce Young**

 During the interview Reverend Bruce Young told the associates that he was the minister at the Trinity Church in Woburn. Trinity Church was his first church. He helped comfort Anne Anderson because of her son’s leukemia.

 Anne had mentioned that problems might be from water, and she knew of eight cases in Woburn. After reading a newspaper article about a lagoon of arsenic in the North Woburn, Reverend Bruce Young felt the need to further investigate the incidents of leukemia in Woburn. He posted an announcement to invite family members affected by childhood leukemia to a meeting where the parents filled out a questionnaire, which he will be giving us, prepared by a nurse at Massachusetts General Hospital. He bought a map and marked it with information from the questionnaire. Woburn had a total of twelve cases of childhood leukemia; eight of the twelve were in East Woburn. He showed this map to Dr. Truman, who was also interviewed.

 Charles Ryan, a reporter, wrote a newspaper article describing a 16% increase in leukemia cases in Woburn. Reverend Bruce Young talked to Mr. Ryan. After Reverend Young held the meeting with families of Woburn, it set off a firestorm because some parishioners were worried about property values and worried the Reverend was creating a panic. He recognized the water in 1996 had a bad taste, and most people could not stand drinking it. He gave the firm the map and a list of the children, which included Anne Anderson, the Zonas, the Nagels, Carlsons, and the Aufieros.

**4. Doctor John Truman**

 Doctor John Truman is a Chief of Pediatric Hematology at Massachusetts General Hospital and routinely cares and treats patients with hematological diseases, which are blood diseases like leukemia. He first started working in this field in the 1960s when no effective treatment for leukemia existed and most children died within weeks of the diagnosis. Due to advances in the field, Chemotherapy and radiation are the protocol for treating leukemia and has saved many lives.

 In January of 2002, Jimmy had been referred to Dr. Truman by Dr. McLean, a general practitioner in Woburn. Jimmy showed signs of pallor and susceptibility to bruising and a bone marrow aspiration indicated 32% blast cells. Blast cells are quickly-multiplying white blood cells that do not reach maturity; their presence in very high proportions is an indicator of leukemia. Dr. Truman diagnosed Jimmy with acute lymphocytic leukemia and immediately underwent an aggressive treatment of chemotherapy and radiation that put the disease in remission. For about three years, he remained in outpatient status receiving only periodic doses of chemotherapy to keep his leukemia under control.

By September of 2005, Jimmy’s blood platelets had decreased, and Dr. Truman order several more bone marrow aspirations. A fourth one revealed a 44% blast cell count. A new treatment was initiated, but it was very likely any further remission would only be temporary. In late 2010, Jimmy had a low level of platelets not directly due to leukemia but aplastic anemia. Essentially, Jimmy had no functioning bone marrow, probably due to the extensive treatment for leukemia he had been undergoing. Jimmy eventually died from complications due to the Aplastic anemia.

Dr. Truman also treated Kevin Kane Jr. in June of 2003. Kevin was only two and a half at the time and had a fever, pallor, and irritability. Dr. Truman diagnosed him with acute lymphocytic leukemia and began a chemotherapy regime and within four weeks Kevin went into in remission. Dr. Truman also treated Patrick Toomey whose pediatrician had referred him to Massachusetts General Hospital after suspecting leukemia. In 2009, when Patrick was ten, Dr. Truman diagnosed him with acute myelocytic leukemia, which is most likely terminal.

Dr. Truman also treated Michael Lilley whose father is a fireman in Woburn. Dr. Truman could not recall Michael’s type of leukemia. Michael passed away around 2005.

Tests have shown that acute myelocytic leukemia may be caused by ionization radiation or chemicals like benzene. Acute lymphomatic leukemia like the type Jimmy and Kevin have no known causes and no external factors have been shown to cause the disease. Viruses have also been shown to cause some kinds of leukemia in animals.

In June 2002, it did not seem all that strange to Dr. Truman that three kids would be diagnosed with leukemia in a city the size of Woburn. Anne Anderson had voiced a concern at the time. However, it is Dr. Truman’s experience that families tend to develop an acute awareness of the disease. They start seeing it everywhere they look. He tried to get Anne to take a step back and see it more objectively. Statistical clustering happens sometimes without any correlation.

In October 2009, Reverend Bruce Young showed Dr. Truman a map of Woburn and the families that had been affected by leukemia. There were twelve cases of leukemia in all, eight in east Woburn, and six within the Pine Street neighborhood. Dr. Truman was not sure that twelve cases in fifteen years were an unusual number but thought it was a very striking cluster. He called the Center for Disease Control and contacted Dr. Clark Heath the leading world expert on leukemia clusters. Heath sent an epidemiologist to Dr. Truman and they collected records from other Boston area hospitals.

Dr. Truman mentioned that New England Medical Center treated Carl (Robbie) Robbins who had been diagnosed with acute lymphatic leukemia in October of 2006. He also mentioned that Children’s Hospital in Boston treated Michael Zona, who had been diagnosed with acute lymphocytic leukemia.

**RECOMMENDATIONS**

 The interviews of Anne Anderson, Donna Robbins, Reverend Bruce Young, and Dr. Truman were fruitful and uncovered other areas to further pursue. It is recommended to interview more families given as leads to investigate the wells in Woburn for a carcinogenic substance, and to find a culpable actor connected to the substance. Furthermore, the interviews indicated other recommendations: interview other experts given as leads, look into other possible law suits, and keep in mind the sensitive nature of any investigations.

 From the facts gained in these interviews, a temporal and geographical pattern of childhood leukemia has emerged. Jimmy Anderson was diagnosed with leukemia in 1999, Robbie Robinson 2008, Kevin Kane in 2003, Patrick Toomey in 2009, and Michael Lilley passed away in 2005. According to Donna Robbins and Reverend Young, the water had been unpalatable since 1996. The firm needs to emphasize and develop these temporal patterns. The families with connections to childhood leukemia given as leads include the Toomeys, the Kanes, the Aufieros, the Zonas, the Nagels, and the Carlsons. They can be interviewed to gain clearer temporal and geographical patterns and derive other information. Anne Anderson mentioned her other children had illnesses other than leukemia, and Robbie Robbins had been a healthy baby at first. Interviews and examinations of medical records may show patterns of illnesses after 1996 as well as health prior to 1996.

 Two important elements are missing or unclear: a culpable actor and a carcinogenic substance. Causation between a culpable actor and the childhood leukemia will need to be developed. The theory is that the bad water in wells of Woburn is within the casual chain. Dr. Truman mentioned some possible causes of leukemia, such as chemicals or viruses. A leukemia-causing carcinogen should be identified and associated with the wells. Unless research shows otherwise, 1996 is our crucial date, and changes to wells or other possible sources of contaminants should emerge around 1996. Find out what wells the city took offline to get the water to taste better; a history should be determined and testing should be done on these specific wells. Interviews indicate a report about arsenic being found in a lagoon in North Woburn; look into reports and newspaper articles over the last 15 years to look for clues of specific chemicals or viruses in the water that could have contaminated the wells. Anne Anderson mentioned the dishwasher corroding, other families may have similar stories, and the possible contaminate may have a corrosive effect on appliances and plumbing.

 Other individuals have information that should to be explored. Dr. Heath has done some investigations of the leukemia clusters in Woburn and would be a good resource for theories and sources of possible contaminants. Charles Ryan of the Woburn Daily Times wrote articles about the arsenic lagoon and levels of leukemia in Woburn and probably has researched valuable information helpful to this case. Thomas Mernin, the Woburn city engineer, has been described by Anne Anderson as a possible source of information about the city’s involvement in the water’s contamination.

 Once a list of possible chemicals is determined, and the culpable actor should be linked to the chemical. There is a long history of chemical development and tanneries in Woburn where corporations sell or need chemicals in their daily business. The dates are very specific and the level of contaminants in the wells would need to be high enough ruin the taste. Therefore, the amount of contaminants released or dumped should be fairly significant. Any movement of this magnitude would have left some trail or knowledge and can be uncovered with some measure of diligence.

 According to Dr. Truman, there are various studies of the causes of leukemia and acute lymphocytic leukemia, which is the primary childhood leukemia in Woburn. Dr. Truman did not know of a study linking acute lymphatic leukemia to an external cause. This could present a problem since our theory requires an external cause coming from the drinking water. The various types of leukemia research should be explored to prove a connection between contaminants in the water and the cases of leukemia found in Woburn.

 There may be other potential lawsuits that need to be looked into. The city’s reasoning for the water being safe and explanations about the bad taste may not be truthful. The city knew the water tasted bad, had access to water, and continued to keep wells open. The firm might want to look into actions against the city. In addition, Robbie Robinson was misdiagnosed and had failed hip surgery for septic and arthritis; a malpractice lawsuit may exist.

 Finally, many of these families have sympathetic stories, such as Donna Robbins’s story of the wig in the shop, and many Woburn residents may be concerned. On the other hand, Reverend Young mentioned that several of his parishioners were concerned about how raising the issue may affect property values, and the city has vigorously defended the wells and water. The interviews indicate that the issue of water and leukemia in Woburn has deep divisions with very emotional underpinnings. Investigations or interviews will need to keep this factor in mind.