October 27, 1997

SPECIAL MASTER'S FINAL REPORT	DATE	COMM.	<u>ACTION</u>
The Honorable Toni Jennings President, The Florida Senate Suite 409, The Capitol Tallahassee FL 32399-1100	11/03/97 01/05/98	HC WM	Favorable Favorable

Re: SB 40 - Senator Campbell HB 3055 - Representative Tobin Relief of Bruce and Janie Silverman

> THIS IS A CLAIM FOR \$1,000,000 BASED UPON A SETTLEMENT AGREEMENT BETWEEN CLAIMANTS AND THE NORTH BROWARD HOSPITAL DISTRICT TO COMPENSATE CLAIMANTS FOR THE DEATH OF THEIR DAUGHTER.

FINDINGS OF FACT:

The claimants are the parents of Alexandra Silverman, who was age 3 at the time of the incident. On Saturday, February 11, 1995, Alexandra began vomiting, and the next day she kept vomiting, and also had several episodes of diarrhea; these are indicative of an intestinal flu called Rotavirus.

Mrs. Silverman arrived at the emergency room of Coral Springs Hospital with Alexandra a little after 5:00 p.m., on Sunday, February 12, 1995. Coral Springs Hospital is owned and operated by the North Broward Hospital District. It took almost 95 minutes before the child was triaged. Around 6:45 p.m., Dr. Margerum, who was working in the emergency room, examined Alexandra and found her to be mildly dehydrated (3-5%).

Alexandra's laboratory tests were essentially normal: her sodium, i.e., salt content in the blood, at 143 and her potassium at 4.2. Normal ranges are 137-145 for sodium and 3.6 - 5.2 for potassium. She was described as alert and easily arousable and her blood pressure was 102/82. At 7:25 p.m., Alexandra was given normal saline through an IV line as ordered by Dr. Margerum. Normal saline has a sodium Special Master's Final Report -- SB 40 October 27, 1997 Page 2

content of 154 and would not reduce the child's sodium level of 143.

Dr. Cadiz, the child's attending physician, was notified at 9:45 p.m., that Alexandra was in the emergency room. He ordered that she be admitted to the pediatric floor and that her IV be changed. Alexandra was transferred to the pediatric floor at 11:00 p.m., and her blood pressure was recorded as 124/39, which according to claimants' expert, is highly abnormal. The IV, as ordered by Dr. Cadiz, was begun at 11:30 p.m., and it is undisputed that Alexandra's sodium level was still 143 or higher at that time. Nurse Hebert, an R.N., and an employee of the North Broward Hospital District, was Alexandra's nurse on the floor. She decided not to hang the potassium as ordered by Dr. Cadiz, because she thought that Alexandra had not urinated while in the emergency room. Between 11:30 p.m., and 2:00 a.m., Alexandra reportedly fell asleep, but would wake up when her side rails were adjusted or when she was touched. She continued to be drowsy but "easily arousable."

Dr. Cadiz saw Alexandra a little after 2:00 a.m., February 13. There is evidence that Alexandra awoke easily and was appropriately feisty and alert. Her blood pressure (BP) was 92/44, pulse (P/) 120, temperature (Temp) 103 degrees. She had good color and her diagnosis was acute gastroenteritis and dehydration.

Around 2:30 a.m., the hospital had a power failure and had to switch to its emergency generators. About 3:00 a.m., the Silvermans went home.

By 3:30 a.m., the back-up generators were no longer providing power to Alexandra's floor of the hospital. From the time of the initial power outage through the second power outage, it is unclear whether Alexandra's IV pump continued to operate on back-up battery power or whether it was necessary to regulate her IV by gravity.

At 4:00 a.m., Nurse Hebert went to check on Alexandra. She took her vital signs: BP 86/42, P/124, respiration (RR) 30, Temp/101 degrees. She removed Alexandra's urine catch bag; it contained 105 cc's. During this time, Alexandra Special Master's Final Report -- SB 40 October 27, 1997 Page 3

> expelled a large watery stool, so the nurse cleaned her up and changed her diaper. During all of these activities, Alexandra never woke up, whereas two hours earlier, the testimony reflects she awoke when the side rails of her bed were lowered. The claimants' expert testified that this was an indication of a change in the child's mental status which the nurse didn't appreciate, and she should have attempted to awaken the child and perform a complete neurological exam or called in a physician to check the child's condition.

> The lights went back on at 5:00 a.m., the nurse started the potassium and examined Alexandra again. Her BP was now 85/36 and her pulse was 144 and bounding. Her respiration was 28 and unlabored. The nurse stated in her report to the hospital that the "patient did not awaken and I started to be a little concerned, but her vital signs were stable...." The claimants' expert testified these were abnormal vital signs and the nurse should have notified the doctor.

At 5:30 a.m., Nurse Hebert changed another large, watery, foul-smelling stool and noted some clear, water-like emesis on Alexandra's pillow. Alexandra still did not wake up when disturbed, but nurse Hebert states that she "was hoping that she would sleep until her mom got there."

Between 6:00 and 6:15 a.m., the Silvermans returned and went directly to Alexandra's room. Nurse Hebert asked the parents to see if they could wake up their child. Alexandra would not wake up, had labored respirations, and had no recordable blood pressure. Her pulse was 158. The nurse did not call a code, but called Dr. Cadiz at home. The record reflects the neonatologist, Dr. Zolfagari, was called at 6:30 a.m., and arrived very shortly thereafter, evaluated the child as totally comatose, ordered oxygen, which was not started until approximately 6:38 a.m., and called the code pink at 6:35 a.m. According to the medical records, no treatment was given to Alexandra by the hospital staff between approximately 6:05 a.m., when she was found in respiratory distress and approximately 6:38 a.m., when she finally received oxygen. When she arrived in ICU, she was brain dead.

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	X-rays revealed severe cerebral edema (brain swelling), which is a well known side effect of hyponatremia (depleted salt content of the blood). It occurs when sodium levels are lowered too far, too fast. Alexandra's sodium dropped from 143 at 11:30 p.m., to somewhere below 125 at 6:00 a.m., according to claimants' experts. Also according to claimants' experts, the only possible medical cause of this rapid drop in sodium was an infusion of the IV fluid far in excess of what was ordered by Dr. Cadiz. The nurse complicated matters further by rewriting the records on her next shift.
	Alexandra Silverman died February 15, 1997.
	There are no outstanding hospital bills. The hospital district has paid \$200,000, the statutory limit.
CONCLUSIONS OF LAW:	Suit was filed in this case. There is competent, substantial evidence in the record upon which a finding of liability on the part of the North Broward Hospital District, through its employee, could be made. The parties have agreed to the amount of damages.
ATTORNEYS FEES:	Limited to 25 percent of recovery under the provisions of s. 768.28, F.S.
<u>RECOMMENDATIONS</u> :	Accordingly, I recommend that SB 40 be reported FAVORABLY.
	Respectfully submitted,

Glenn Lang Senate Special Master

cc: Senator Campbell Representative Tobin Faye Blanton, Secretary of the Senate Richard Hixson, House Special Master