

**SAFE WATER ASSOCIATION, INC.,**

**Plaintiff,**

**vs.**

**Case No. 92 CV 579**

**CITY OF FOND DU LAC,**

**Defendant.**

---

**AFFIDAVIT OF PHILIP R.N. SUTTON, B.D.Sc.  
IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT**

---

Country of Australia  
State of Victoria

Philip R.N. Sutton, B.D.Sc. being first duly sworn on oath, under penalty of perjury, and with personal knowledge of the information contained herein, respectfully states to the Court as follows:

1. Before my retirement, I was the Senior Lecturer in Dental Science in the Dental School of the University of Melbourne, for eleven years.
2. I was also a Senior Research Fellow of the University of Melbourne for nine years. When I retired, I was appointed an Academic Associate of that University.
3. Prior to joining the University, I conducted a private dental practice for twenty-five years and during the war spent five years in the Australian Army Dental Corps.
4. Therefore, I am not an 'ivory tower' scientist, but one with a very solid practical knowledge based on my thirty years experience doing clinical dental work.
5. Qualifications. A knowledge of both dentistry and academic statistics is essential if an investigator is to assess adequately the reports from fluoridation 'trials'.
6. Dental: I received my B.D.Sc.(Hons.) -- Bachelor of Dental Science -- from the University of Melbourne and later the D.D.Sc. (Doctor of Dental Science) from that University.
7. This latter degree is often, but should not, be confused with the American and Canadian D.D.S. (Doctor of Dental Surgery) degree, which is awarded on graduation in both those two countries.
8. The D.D.Sc. degree is the most senior dental degree in Australia. Under the current regulations, before entering for this degree a candidate must be a graduate of at least five years standing and must already possess either a Ph.D or a M.D.Sc. (Master of Dental Science) degree. After prolonged research, he must submit for examination a thesis which 'makes a substantial contribution to dental knowledge.'
9. Because of these very stringent requirements it is widely held to be the most senior dental degree obtainable anywhere in the world.
10. I am also a Fellow of the Royal Australasian College of Dental Surgeons, having been appointed a Foundation Fellow at its inauguration.

11. Statistical. I completed the course in Statistics for Research Workers conducted by the Department of Statistics, University of Melbourne. I then was admitted as a member of the Statistical Society and was later elected Chairman of the Victorian Branch of the Biometric Society (which is devoted to the statistical analysis of biological data, an essential skill if one is to comprehend the results published from fluoridation 'trials' ).
12. Over the years I have written numerous papers and letters on a wide variety of subjects. Those which involve dental caries (decay) in general include:
  - a. Stress and Dental Caries, *Nature* 195: pp. 254-256, 1962.
  - b. The early onset of acute dental caries following mental stress. *New York State Dental Journal* 31: 450. 1965.
  - c. Stress and Dental Caries in *Advances in Oral Biology*, Vol. 2, P.H. Staple Ed. (Academic Press, New York, 1966) p 101-.
  - d. Acute dental caries, mental stress, immunity and the active passage of ions through the teeth. *Medical Hypotheses* 31: 17,1990.
13. Those which relate to fluoridation include:
  - a. Some statistical observations on fluoridation trials (With professor Sir Arthur Amies) *Medical Journal of Australia*, 1 February, 1959.
  - b. Does fluoride ingestion affect developing immune system cells? *Medical Hypotheses* 23: 335-336, 1987. (Exhibit\_\_\_\_)
  - c. Is the ingestion of fluoride an immunosuppressive practice? *Medical Hypotheses* 35: 1-3, 1991. Reprinted in *Fluoride* 25: 159-160, 1992. (Exhibit\_\_\_\_).
  - d. A fifty-year-old accepted but unconfirmed hypothesis. *Medical Hypotheses* 27: 153-156, 1988. (Exhibit\_\_\_\_).
  - e. Can water fluoridation increase orthodontic problems? *Medical Hypotheses* 26: 63-64, 1988. (Exhibit\_\_\_\_).
  - f. I did the statistical analysis for: Smith, G.E. A simple method for obtaining bone biopsy specimens for fluoride analysis and some preliminary results. *New Zealand Medical Journal* 98: 485, 1985.
  - g. Is fluorosis an etiological factor in overuse injuries (RSI)? *Medical Hypotheses* 21: 369-371, 1986.
  - h. Is fluoride ingestion a factor in the development of R.S.I.? *Computer Control Quarterly Winter*, 1986, pp. 50-53. (Exhibit\_\_\_\_).
  - i. The overdosing of bottle-fed infants with fluoride. *Breastfeeding Review* December, 1984.
  - j. The failure of fluoridation. *Fluoride* 23: 1-4, 1990. (Exhibit\_\_\_\_).
  - k. Is fluoride ingestion a cause of repetitive strain injury? *The Australian Secretary* June, 1985.
  - l. Fluoridation and the Constitution. *Environment and Planning Law Journal* 6: 58, 1989.
14. In addition I have written three books on fluoridation:
  - a. *Fluoridation: Errors and Omissions in Experimental Trials.* (Melbourne University Press, 1959, second, enlarged, edition 1960).
  - b. *Fluoridation, 1979 Scientific Criticisms and Fluoride Dangers.* 1980. (A submission to the Victorian Government fluoridation inquiry).
  - c. *The Greatest Fraud: Fluoridation.* (The manuscript of this book has just been completed but it has not yet been published).
15. My field of study, interest and expertise has led me, for a period of thirty-eight years, to consider thoroughly, and in an impartial manner, research into the safety and effectiveness of artificially fluoridated drinking-water.
16. I have not considered in any detail the legal and ethical aspects. Both these involve questions of opinion and I prefer to deal with facts, with statements

and conclusions which can be checked and confirmed by anyone with the necessary training and with the desire to do so.

17. However, in passing, it may be mentioned that fluoridation can be illegal in some areas. After a marathon fluoridation inquiry in the High Court, Edinburgh (to which I was called from Australia to give evidence for several days) Lord Jauncey found that fluoridation was illegal in Scotland.

### **EFFECTIVENESS OF FLUORIDATION**

18. During thirty-eight years of studying reports on fluoridation, I have considered a large body of evidence, most of which was reports on fluoridation 'trials' which have been claimed to establish that fluoridation is very efficacious, in that it substantially decreases the number of decayed teeth in a treated community.
19. I have concentrated my personal investigations on the question of the efficacy of fluoridation, partly because my training in both dentistry and academic statistics enables me to understand and criticize fluoridation reports, but mainly because this is the key question in this discussion -- if fluoridation has not been shown to work, it should be abandoned, whether or not it is legal and ethical and irrespective of whether it is safe.

### **Purported Evidence of Efficacy**

20. Over the years, I have studied all the lists I have been able to find which name studies which purport to show that fluoridation is efficacious. The most comprehensive of these was that published by Murray and Rugg-Gunn in their book in 1982. This listed 128 studies, the four original ones and 124 which had commenced after 1950. An examination of that list showed that 101 of those 124 studies were either duplicates, having been listed more than once, or were obviously of such a poor standard that they could be disregarded as not being science. Despite determined attempts by the library staff to obtain them, five of the remaining reports could not be obtained for study. None of the remaining eighteen adhered to the standard scientific and statistical requirements of such a study.
21. Despite extensive research and effort, studying all available published reports from fluoridation "trials," not one study has been found which obeys the standard scientific and statistical requirements of a valid study and has demonstrated that fluoridation has reduced the number of decayed teeth in the medicated community.

### **Studies Which Show That Fluoridation Is Ineffective.**

22. As distinct from the many studies which have failed to show that fluoridation is efficacious, there are at least three which have demonstrated that it does not work.
23. A study conducted by the U.S. National Institute of Dental Research (N.I.D.R.). This is the only large-scale study held to assess the effects of prolonged ingestion of artificially fluoridated drinking-water (1 ppm). It involved 39,207 children up to the age of seventeen years in 84 geographical areas in the U.S.A. In 28 of these areas the children had drunk fluoridated water for the whole of their lives, in 27 areas they had been fluoridated for only a part of their lives, and in 29 areas they had drunk non-fluoridated water since birth -- up to seventeen years.
24. Unfortunately, approximately half of the data obtained in this expensive

- (\$3,670,000) survey was suppressed by the N.I.D.R. and 'left in a box somewhere', according to the statement of the statistician employed in the study (Hileman, 1989, Exhibit\_\_\_\_\_).
25. However, those data were eventually obtained by Dr. John Yiamouyiannis, after much fighting, by using the provisions of the U.S. Freedom of Information Act. He published a report of the result of his analysis of those suppressed data in a Guest Editorial article in American Laboratory in 1989.(Exhibit\_\_\_\_\_).
  26. His detailed analysis showed that there was no difference in the number of decayed teeth in the subjects who had been fluoridated all their lives and those who had never drunk fluoridated water.
  27. This result, based on such a very large sample and conducted under the auspices of the N.I.D.R., PROVIDES STRONG EVIDENCE THAT DRINKING ARTIFICIALLY FLUORIDATED WATER FROM BIRTH DOES NOT REDUCE THE NUMBER OF DECAYED TEETH WHICH DEVELOP IN THE MEDICATED COMMUNITY.
  28. In 1981, R. Ziegelbecker (a statistician at the Institute for Environmental Research, Graz, Austria) studied all the reports he could obtain of studies made anywhere in the world, in 136 areas, in which the drinking-water contained fluorides naturally. This involved 48,000 12-14-year-old children. (Exhibit\_\_\_\_\_)
  29. He 'graphed' these results and, although he found a very strong relation between the fluoride content of the water (0.15 to 5.8 ppm fluoride) and the prevalence of dental fluorosis -- mottled teeth, ( $R^2 = 0.849646$ , where 1.0 would indicate a perfect agreement), there was no similar association between the natural fluoride content of the waters and the prevalence of dental decay ( $R^2 = 0.0098281$ ).
  30. It was originally thought (from small-scale investigations) that there was less dental decay in 'naturally fluoridated' areas, and the earliest fluoridation 'trials' were said to be set up to see whether artificial fluoridation would produce the same result.
  31. However, instead of finding that fluoridated drinking-water reduces dental decay, it is now seen that having drinking-water which is EITHER NATURALLY OR ARTIFICIALLY FLUORIDATED DOES NOT REDUCE THE NUMBER OF DECAYED TEETH IN A COMMUNITY.
  32. The third study may seem to be a strange choice to show that fluoridation is ineffective, for it was set up by the British Ministry of Health to 'demonstrate' that fluoridation is efficacious. The authors claimed that this eleven-year study had proved the safety of fluoridation -- although they did not investigate this aspect and provided no data to support that claim.
  33. They also claimed many times in their report that this process had been 'beneficial'. Professor Albert Schatz stated in 1972: " If you read the official report uncritically and accept it on faith, you get the impression that fluoridation reduced caries. But if you carefully analyze the statistics [as I have done] you quickly realize that fluoridation did not reduce caries. The official report really proves just the very opposite to what it claims to prove. The official report is valuable because it so clearly reveals the failure of fluoridation in Great Britain." The alleged benefits are thus nothing more than a statistical illusion. (Exhibit\_\_\_\_\_).
  34. Some of the evidence for the failure of fluoridation was mentioned in a Guest Editorial in Fluoride (Sutton, 1990). (Exhibit\_\_\_\_\_).
  35. I have based my conclusions about fluoridation primarily upon my own research and also on evidence which I have studied and which appears after extensive examination to be scientifically sound.
  36. My conclusions regarding fluoridation, achieved by using hydrofluosilicic

acid to attain a fluoride concentration of between 0.5 and 1.5 ppm, are as follows:

- A. Hydrofluosilicic acid is a toxic waste product which has no known positive health effects on the human body.
- B. Fluoridation has no significant impact upon the number of decayed teeth a consumer experiences. The studies I have cited above show that there is no statistically significant difference between the number of decayed teeth found in fluoridated and unfluoridated areas.
- C. Fluoridation can, and does, have a serious and harmful effect upon consumers, including a number of health problems.

### **SAFETY OF FLUORIDATION**

37. Those problems I have personally studied include:
- . Dental fluorosis. This condition, formerly called 'mottled teeth', develops in approximately ten percent of children who drink fluoridated water during the period of tooth formation. It is a permanent disfigurement which can be alleviated only by expensive dental treatment. In its mildest form it is seen as 'ghastly white' (Black, 1916) spots or areas on the surface of the teeth (called 'pearly white' in the pro-fluoridation literature). More affected teeth also have areas of brown staining. This condition is often dismissed by pro-fluoridationists as merely cosmetic, but some people are very ashamed of their ugly appearance and this can lead to marked psychological problems. (In one case I encountered, the psychiatrists attributed the attempted suicide of a young child to shame resulting from this condition).
  - a. Suppressed function of the immune system. This leads to a person being more susceptible to all diseases and to cancer. One may consider that it is the mechanism behind the increase in cancer death rates following fluoridation in the ten largest fluoridated cities in the U.S.A. (Exhibit\_\_\_\_\_).
  - b. Skeletal fluorosis. The faulty formation of bone, associated with the development of crippling effects. One of these effects, seen in subjects who had high levels of fluoride in their bones, is called in Australia R.S.I. (repetition strain injury). This condition typically affects some typists, computer operators and musicians, and can partially or completely prevent them from pursuing those occupations. (Exhibit\_\_\_\_\_).
38. The evidence presented in articles I have read also suggest that the following adverse health effects from fluoridation have been firmly established:
- o Suppressed thyroid function,
  - o Increased infant mortality rates,
  - o The destruction of some enzymes,
  - o Renal (kidney) failure,
  - o Allergic reactions.
  - o Damage to the genetic material of cells.
39. Approximately forty laboratory studies have now shown that exposing cells to fluoride can damage their genetic material. This fact could well be the most serious consequence of fluoridation as it may lead to the birth of deformed children in future generations.
40. My personal studies have led me to the same conclusion as the committee of senior scientists appointed to study fluoridation by the Minister for the Environment, Quebec Government, Canada (Bundock, et al. 1979). The

committee stated: "In the circumstances, the committee is of the opinion that an additional amount of fluorides [by fluoridation] would be not only useless but dangerous. In other words, we should be more concerned about possible intoxication than with deficiencies of fluorides." (emphasis in the original French edition).

41. I make this Affidavit in support of the Plaintiff's Motion for Summary Judgment.

---