HB
81

ALASKA DENTAL SOCIETY

OFFICE OF THE EXECUTIVE DIRECTOR

2211 Sunrise Drive
Anchorage, Alaska 99504

February 12, 1973

Representative Genie Chance
Pouch V
Juneau, AK 99801

Re: Memorandum - fluoridation

Incorporation of the provisions of HB81 in the responsibilities of either the Dept. of Health & Social Service or the Dept. of Environmental Conservation would be acceptable to the Alaska Dental Society as long as positive results were obtained. It does seem appropriate to put the statute dealing with fluoridation under a section headed "Disease Control" for that indeed is what its purpose is to control caries which is truly a rampant disease.

We do understand the practical difficulties involved in small muncipal water supplies. But as Mr. Brewer states, a majority of the large muncipalities have fluoridated water thus already facing the problem. I would not advise that we limit the population to 2,000 or 3,000 for it is in the smaller communities and villages that dental disease is most rampant and where professional help is least available. Research in fluoridators have rapidly advanced. There are available simple inexpensive units that can be used for as small a water supply as that used in an individual home. I will send you brochures on these units under separate cover. As you will see, "capability of providing fluoridation" exists everywhere.

Sincerely,

G. T. Morrow, D.M.D.
Executive Director

crb
Enclosures

cc: Honorable Max C. Brewer
Honorable Mike Bradner
Honorable Willard Bowman
Honorable Hugh Malone
✓Honorable Selwyn Carrol
Honorable Helen Beirne
Honorable Milo Fritz
Honorable Charles C. Degnan
Mr. Caleb Bungowiyi
Dr. Tom Austin
Dr. Joshua Wright
Mr. Harry Porter

P. S. Public Law 86-121 provides a mechanism for the U. S. Public Health Service to provide fluoridators to communities where 80% of the population are their beneficiaries.

FLUORIDATED WATER SUPPLIES

Community	Population Served 1970 Preliminary Census	Date of Installation	Chemical Known
Anchorage	46,237	1953	Na_2SiF_6
Douglas	1,237	1964	Na_2SiF_6
Eielson AFB **	5,232	1958	NA
Elmendorf AFB **	15,700	1957	NA
Fairbanks	14,336	1962	Na_2SiF_6
Fort Richardson **	10,500	1957	NA
Fort Wainwright **	8,800	1957	NA
Mt. Edgecombe	1,900	1963	NAF
Sitka	3,327	1963	NA
USN Kodiak **	3,500	1961	NA
Metlakatla *	160 Homes	1963	NaF
Yakutat *	47 Homes	1963	NaF
Angoon *	60 Homes	1964	NaF
Unalakleet *	110 Homes	1965	NaF
Old Harbor *	41 Homes	1969	NaF
Ouzinkie *	43 Homes	1969	NaF
Port Lions *	42 Homes	1968	NaF
English Bay *	16 Homes	1966	NaF
Hoonah *	175 Homes	1966	NA
Holy Cross *	38 Homes	1969	NaF
Russian Mission *	28 Homes	1969	NaF
Hydaburg *	NA Homes	NA	NaF
Goodnews Bay *	39 Homes	1971	NaF
Bethel *	200 Homes	1971	NaF

FLUORIDATED WATER SUPPLIES

Community	Population Served 1970 Preliminary Census	Date of Installation	Chemical Known
Minto *	35 Homes	1971	NaF
Lower Kalskag *	36 Homes	1971	NaF
Chistochina *	9 Homes	1971	NaF
Dot Lake *	9 Homes	1971	NaF
[illegible]	1268		

Est Pop Served = [illegible]

NA = Not Available
* USPHS Indian Health Service Installations
** Federal Installations

% of Population in State on
Fluoridated Water Supplies

[illegible] / 302,[illegible] ≅ 30%

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

WILLIAM A. EGAN, GOVERNOR

POUCH O — JUNEAU 99801

January 26, 1973

The Honorable Helen Bierne, Chairman
Health, Welfare and Education Committee
House of Representatives
Pouch V
Juneau, Alaska 99801

Dear Mrs. Bierne:

Re: HB 81, Mandatory Fluoridation

In accordance with the authority set forth in AS 46.03.020(10)(C), I suggest the desirability of incorporating the provisions of House Bill 81 into the program of the Department of Environmental Conservation, rather than into the Department of Health and Social Services. Whereas the bill deals with the engineering aspects of fluoridating public water supplies, it proposes that the new material be inserted as AS 18.15.210, a section dealing with a variety of infectious and contagious diseases under the heading of "Disease Control." While proper fluoridation has been shown to be an effective preventative against dental caries, specific requirements of this legislation are engineering in nature.

As you consider this bill, I should like also to invite your attention to certain practical difficulties which will be involved, no matter who is to administer it. Where fluoridation has been mandated in the contiguous 48 states, whether by legislation or by regulation, it has been common practice to establish a population threshold, such as 2,000 or 3,000 persons in a municipality, above which the application of fluoride becomes mandatory. If this suggestion were followed in Alaska, fluoridation could become practical. Very small municipalities here have experienced considerable difficulty in attempting to maintain even chlorination, much less the more difficult practice of fluoridation. A prime example is the situation during the winter of 1971-72 when several hundred persons in Cordova became ill because the chlorination equipment had failed and new parts had not arrived.

It is also interesting to note that most major communities in Alaska with the capability of providing fluoridation, already do so, and

that for many years Alaska has appeared in the top ranking of the U.S. Public Health Service listing of percentage of persons receiving fluoridated water from municipal supplies.

Sincerely yours,

Max C. Brewer
Commissioner

cc: The Honorable Genie Chance
The Honorable Mike Bradner
The Honorable Willard Bowman
The Honorable Hugh Malone

(same letter to The Honorable Selwyn Carroll)
(Local Govt. Comm. Chmn.)

Figure 12. Fluoridation Check-List

Chemical And System	Sodium Fluoride Manual Solution Preparation	Sodium Fluoride Automatic Solution Preparation	Fluosilicic Acid Diluted
Water Flow Rate	Less Than 500 gpm	Less Than 2000 gpm	Less Than 500 gpm
Population Served By System Or Each Well Of Multiple-Well System	Less Than 5000	Less Than 10,000	Less Than 10,000
Chemical Cost, FOB Manufacturer	22 - 25¢/lb	20 - 22¢/lb	8 - 15¢/lb (30% Basis)
Chemical Cost/lb Fluoride Ion	50 - 57¢	46 - 50¢	33 - 63¢
Equipment Cost/Unit	$100 - $500	$500 - $1000	$250 And Up
Equipment Required	Solution Feeder, Mixing Tank, Scales, Mixer	Solution Feeder, Saturator, Water Meter	Solution Feeder, Scales, Measuring Container, Mixing Tank, Mixer
Feed Accuracy	Depends On Solution Preparation And Feeder	Depends On Feeder	Depends On Solution Preparation And Feeder
Chemical Specifications And Availability	Crystalline NaF, Dust-Free, In Bags Or Drums. Generally Available.	Downflow - Coarse Crystalline NaF In Bags Or Drums. May Be Scarce. Upflow - Fine Crystalline NaF	Low-Silica Or Fortified Acid In Drums Or Carboys. Generally Available.
Handling Requirements	Weighing, Mixing, Measuring	Dumping Whole Bags Only	Pouring Or Siphoning, Measuring, Mixing, Weighing
Feeding Point	Injection Into Filter Effluent Line Or Main	Injection Into Filter Effluent Line Or Main	Injection Into Filter Effluent Line Or Main
Other Requirements	Solution Water May Require Softening	Solution Water May Require Softening	Dilution Water May Require Softening
Hazards	Dust, Spillage, Solution Preparation Error	Dust, Spillage	Corrosion, Fumes, Spillage, Solution Preparation Error

STATE OF ALASKA

WILLIAM A. EGAN, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

POUCH O — JUNEAU 99801

March 28, 1974

The Honorable Selwyn Carrol
Chairman, House Committee on Community
and Regional Affairs
Alaska State House
Pouch V
Juneau, Alaska 99801

Dear Representative Carrol:

Commissioner Max Brewer and I appreciated being given the opportunity to answer questions at your committee hearing Monday morning, March 25, 1974.

In response to Representative Terry Gardiner's inquiry regarding the cost of fluoridation, I have enclosed a copy of a summary table prepared by the Environmental Protection Agency in 1972 and applicable for lower States. The equipment costs do not include installation, nor do they include the cost of a water softener which would be required for waters with hardness greater than 75 ppm (very "soft" water).

Further, I have obtained information from Juneau indicating their total equipment and installation cost was approximately $5000 (approximately $0.65 per capita). Chemicals cost $0.50 per pound (compared with $0.15 per pound in the table) and their estimated operating cost is $0.50 per capita per year (compared with $0.16 per capita per year on a national level).

For remote communities and very small installations such as schools I do not have this information, however, the unit costs for transportation and labor are likely to be considerably more.

Nevertheless, as we indicated at the meeting, it is not the cost that is of concern to us so much as it is insuring that fluoridation will be provided only for those water supplies which have adequate control over operation and maintainance of their systems on a continuous basis after they are installed.

Please feel free to contact us further should there be additional questions.

Sincerely,

Jonathan Scribner

Jonathan W. Scribner, Chief
General Engineering Section

cc: Representative Terry Gardiner
Guy Van Doren