TOM LEE President



Harold McLean **Public Counsel**

ORIGINAL

STATE OF FLORIDA OFFICE OF PUBLIC COUNSEL

C/O THE FLORIDA LEGISLATURE 111 WEST MADISON ST. **ROOM 812** TALLAHASSEE, FLORIDA 32399-1400 850-488-9330

EMAIL: OPC_WEBSITE@LEG.STATE.FL.US WWW.FLORIDAOPC.GOV

ALLEN BENSE Speaker



Charles J. Beck **Deputy Public Counsel**

February 15, 2005

Blanca S. Bayo, Director Division of Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

Re: Docket No. 010503-WU

Dear Ms. Bayo:

Enclosed for filing in the above-referenced docket are the original and 15 copies of the Joint Prehearing Statement of V. Abraham Kurien, MD, Harry Hawcroft, Ed Wood, and Citizens of Florida. A diskette in Word format is also submitted.

Please indicate the time and date of receipt on the enclosed duplicate of this letter and return it to our office.

COM <u>5</u>	Sincerely,
CTR ECR	challe j
GCL OPC	Charles J. Beck Deputy Public Co
MMS CJB:bsr	
RCA cc: all parties of record	
SEC RECEIVED & FILED	
FPSC-BUREAU OF RECORDS	

ounsel

DOCUMENT NUMBER-DATE 01546 FEB 15 8 FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for Increase in Water) D	ocket 010503-WU
Rates for Seven Springs System in) Pasco County by Aloha Utilities, Inc.) Fi	iled February 15, 2005

JOINT PREHEARING STATEMENT OF V. ABRAHAM KURIEN, MD, HARRY HAWCROFT, ED WOOD, AND CITIZENS OF FLORIDA

Pursuant to Commission orders PSC-04-0728-WS issued July 27, 2004, PSC-04-1217-WS issued December 9, 2004, and PSC-05-0069-PCO-WU issued January 19, 2005, V. Abraham Kurien, MD, Harry Hawcroft, Ed Wood, and the Citizens of Florida (collectively "Customers") file this Prehearing Statement.

Witnesses

V. Abraham Kurien, MD, filed direct testimony and will be filing rebuttal testimony in this proceeding.

Exhibits

Exhibit Name	EX. NO.
No Objection Statement from Aloha Utilities Citizens Advisory Committee, July 21, 2003	VAK-1
Letter to Marshall Willis from Atty. Steve Burgess, JULY 23, 2003	VAK-2

Letter from V. ABRAHAM KURIEN, M.D. to Atty. Steve Burgess of OPC, June 13, 2004, Submitted by reference to PSC on June 16, 2004	VAK-3
PSC Memorandum, June 17, 2004 – Page 19	VAK-4
Phase II Audit Report by Dr. Audrey A. Levine, Page iv	VAK-5
Letter from Mr. David Porter to Mr. Douglas Bramlett, September 11, 1997	VAK-6
"Oxidation Coupled With Filtration For Removal of Hydrogen Sulfide From Groundwater" by Dr. Audrey A. Levine, Blake J. Raymer, Johna Jahn, Arnold Becken, American Water Works Association, Water Quality Technology Conference, 2003	VAK-7
Monthly Operating Reports submitted by Aloha to DEP	VAK-8
"Turbidity Formation During Hydrogen Sulfide Chlorination", Troy Lyn et al. American Water Works Association Proceedings 1993, Water Quality Technology Conference, Miami 1993, Part II, Pages 981, 984 and 985	VAK-9
FPSC Vote Sheet, June 29, 2004	VAK-10
Memorandum from Mr. Devlin to Dr. Mary Bane	VAK-11
E-mail correspondence between Dr. Kurien and Mr. Devlin	VAK-12
Letter to PSC Chairman Baez from V. Abraham Kurien, July 6, 2004	VAK-13
Letter to OPC Atty. Charles Beck	

from V. Abraham Kurien, August 22, 2004 for transmission to PSC Atty. Rosanne Gervasi	VAK-14
Letter from Mr. Tom Walden to Dr. Christine Owen of TBW for clarification for TBWA standards, September 1, 2004	VAK-15
Comments on Feasibility of Monitoring for Hydrogen Sulfide at Customer Meters: Report from Mr. David Porter to Mr. Stephen Watford, forwarded to PSC, September 3, 2004	VAK-16
Presentation before the PSC Hearing, April 8, 2004, by Dr. V. Abraham Kurien	VAK-17
Filing before the PSC, August 10, 2004: Petition Requesting Hearing and Protest of Proposed Agency Action	VAK-18
Aloha's own records of Flushing Reports in the year 1999 with an analysis of the findings by Dr. Kurien	VAK-19
The Pasco County Black Water Study, submitted by Van Hoofnagle, August 9, 1999 and an analysis of the findings by Dr. Kurien	VAK-20
Phase II Audit Report by Dr. Levine, Pages 27-32	VAK-21
Scanning Electron Micrograph, Figures 31, Phase II Report	VAK-22
Phase II Report, Page 20, Figure 14b	VAK-23
Phase I Report, Page 20	VAK-24

Phase I Report, Page 10 VAK-25

Tampa Bay Water Exhibit D,
Action Level Notes VAK-26

Docket No. 020896-WS, PSC letter dated March 29, 2004 Staff Data Request Data submission by Aloha Utilities, Inc. VAK-27

Statement of Basic Position

Order No. PSC-02-0593-FOF-WU was issued in April 2002 for the specific purpose of significantly reducing the incidence of "black water" and related complaints. That Order required removal of 98% of hydrogen sulfide from raw water in Aloha's wells from which underground water is pumped and processed using chlorination as the sole method. On October 18, 2002 Aloha requested modification of the Order, because it felt that achieving the 98% removal standard was at best very expensive and at worst impossible. On July 23, 2003 OPC submitted a letter stating that the "Citizens agree that the 98% removal standard should be replaced with other standards". The letter suggested the use of the regional standard that the Tampa Bay Water Authority (TBW) uses of a total sulfide level of 0.1mg/L . The same letter noted, "Additional standards may also be appropriate depending on the final audit report findings".

On June 9, 2004 Aloha requested that the "fourth ordering paragraph of Order No PSC-02-0593-FOF-WU be revised to read as follows:

"Ordered that Aloha Utilities, Inc. shall make improvements to its wells 8 and 9 and then to all of its wells as needed to

meet a goal of 0.1mg/l of sulfides in its finished water as that water leaves the treatment facilities of the utility. Compliance with such requirement shall be determined based upon samples taken at least annually from a point of connection just after all treatment systems and before entry of such water into the transmission and distribution system of the Utility. Aloha should implement this standard no later than February 12, 2005". (underlining added).

This change distorts the Tampa Bay Water Standard. The TBW standard states "Water supplied from the Authority's System shall be sampled annually at a minimum at the Point(s) of Connection for the following parameters". TBW supplies water to its member customers and the water is sampled at the point of connection into the customer's pipes. Instead, Aloha wants the sampling to be done "after all treatment systems and before entry of such water into the transmission and distribution system of the Utility", which is well before (in some cases miles away) it reaches the point of connection with its customer's pipes.

This is a major departure from the TBW standard. TBW maintains its standard to the point of connection with its customer's pipes and not at its treatment facility. If the intent of the Commission is to ensure that Aloha adopts the same standard as the TBWA, which the Citizens agreed to on July 23, 2003, then the language of the modification must be different from that suggested by Aloha and adopted by the Commission in its vote on June 29, 2004.

A report prepared by Dr. Audrey Levine in February 2004 states that a "trace amount of hydrogen sulfide was detected in the influent to the main plant (0.12mg/L) during the November sampling". The main plant receives its influent from treated water from wells 1,2, 3 and 4. On November 12, 2003 the samples that were taken after the

treatment facilities from these wells showed the levels of hydrogen sulfide to be less than 0.01 mg/L at all wells. Yet the hydrogen sulfide level in the influent into the main plant had risen to 0.12 mg/L during the transmission from the wells into the main plant reservoir. This strongly indicates re-formation of hydrogen sulfide is occurring within Aloha's transmission or distribution system, before the water reaches the customer's pipes. This will cause black water. Therefore, a standard of 0.1mg/L maintained at "treatment systems and before entry of such water into the transmission and distribution system of the Utility" (the modification of TBW standard recommended by Aloha and voted upon by the Commission) is no guarantee to the customers that such low levels will be maintained to the point of connection with the customer's pipes. Aloha Utility must be held responsible for the quality of its water throughout its transmission and distribution system to the point of connection with its customer's pipes, the domestic side of the meter, as TBW holds itself responsible. Since re-formation of hydrogen sulfide is considered to be the major reason for corrosion of pipes and formation of black water, the standard should be maintained to the point of connection with the customer's pipes – the domestic meter.

Since Aloha does not have a central treatment plant and water from different wells are pumped into the distribution manifold there is a possibility that hydrogen sulfide levels are variable in different parts of Aloha's transmission and distribution system. Therefore it is important to check hydrogen sulfide levels at different sites, at the domestic meter on a rotational basis. Since hydrogen sulfide levels fluctuate seasonally, monthly tests are also necessary for ensuring compliance to the standard. Once a year sampling is not adequate for process control.

Aloha will soon receive water from Pasco County Water utility. Since Pasco County has not agreed to ensure that the water delivered to Aloha will meet the TBW standard, there is a possibility that such water may contain higher concentrations of hydrogen sulfide than the TBW standard. Mixing of water from Pasco County Utility and water from the Aloha wells will take place; without careful blending and further treatment, the mixed water may contain more hydrogen sulfide levels than the TBW water standard. This lack of uniformity of hydrogen sulfide levels in Aloha's distribution system may result in persistence of the pattern of black water distribution now seen in the Seven Springs area.

Since Aloha does not undertake monitoring of hydrogen sulfide levels as part of process control and oxidant levels are manually adjusted, there is always the possibility of a mismatch between the two. An adequate chlorine residual is no guarantee of conversion of all hydrogen sulfide to sulfate. Elemental sulfur is almost always a likely intermediate product. In view of the association between elemental sulfur and black water, recently emphasized by the latest FDEP guidelines, it seems unwise not to include elemental sulfur within the standard in any attempt to reduce the incidence of black water.

Issues and Positions

Issue 1: Should the reference to sulfide in "finished water" in the proposed agency action order be stated as a maximum containment level for total sulfides of 0.1 mg per liter of delivered water at the point of its entry into the domestic system at the domestic meter?

Position: Yes, the reference to sulfide in "finished water" in the proposed agency action order should be stated as a maximum containment level for total sulfides of 0.1 mg per liter of delivered water at the point of its entry into the domestic system at the domestic meter

Issue 2: Should the improvements be such that sulfide present in raw water or generated during treatment and transmission be removed, not converted, to a level not to exceed 0.1 mg/L, in finished water delivered at the point of entry into the domestic system?

Position: Yes, the improvements should be such that sulfide present in raw water or generated during treatment and transmission be removed, not converted, to a level not to exceed 0.1 mg/L, in finished water delivered at the point of entry into the domestic system, if this can be done economically.

Should compliance with such requirements be determined based upon samples taken at least once a month at a minimum of two sites at domestic meters most distant from each of the multiple treatment facilities? Should such sites be rotated to provide the greatest likelihood of detecting any departure from the maximum levels permitted?

Position: Yes, compliance with such requirements should be determined based upon samples taken at least once a month at a minimum of two sites at domestic meters most distant from each of the multiple treatment facilities. Such sites should be

rotated to provide the greatest likelihood of detecting any departure from the maximum levels permitted.

Other Matters

There are no pending motions upon which the customers seek action, customers have no pending requests or claims for confidentiality, there is no requirement contained in the order establishing procedure with which the customers cannot comply, and customers have no objection to the qualification of any witness as an expert.

Respectfully submitted,

V. Abraham Kurien, MD, 1822 Orchardgrove Avenue New Port Richey, FL 34655

Harry Hawcroft 1612 Boswell Avenue New Port Richey, FL 34655

Ed Wood 1043 Daleside Lane New Port Richey, FL 34655

Charles J. Beck

Deputy Public Counsel Florida Bar no. 217281

Office of Public Counsel c/o The Florida Legislature 111 W. Madison Street

Room 812 Tallahassee, FL 32399-1400

(850) 488-9330

DOCKET NO. 010503-WU CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished by U.S.

Mail or hand-delivery to the following parties on this 15th day of February, 2005.



Rosanne Gervasi, Esquire Division of Legal Services Fla. Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

Mr. Harry Hawcrof 1612 Boswell Avenue New Port Richey, FL 34655

Edward O. Wood 1043 Daleside Lane New Port Richey, FL 34655

Aloha Utilities, Inc. Mr. Stephen G. Watford 6915 Perrine Ranch Road New Port Richey, FL 34655-3904

Wayne T. Forehand, Chairman Citizens' Advisory Committee 1216 Arlinbrook drive Trinity, FL 34655-4556

Ann Winkler Riverside Village Estates, Unit 4 4417 Harney Court New Port Richey, FL 34655 F. Marshall Deterding, Esquire John Wharton, Esquire Rose, Sundstrom and Bentley, LLP 2548 Blairstone Pines Drive Tallahassee, FL 32301

V. Abraham Kurien, M.D. 1822 Orchardgrove Avenue New Port Richey, FL 34655

Senator Mike Fasano 8217 Massachusetts Avenue New Port Richey, FL 34653

> John H. Gaul, Ph.D. 7633 Albacore Drive New Port Richey, FL 34655

James Mitchell, Jr. Riviera Home Owners Association 5957 Riviera Lane New Port Richey, FL 34655

John Parese Riverside Villas 4029 Casa del Sol Way New Port Richey, FL 34655