$\it DOCKET~NO.:~010503-WU$ - Application for increase in water rates for Seven Springs System in Pasco County by Aloha Utilities, Inc.

WITNESS: Direct Testimony of Gerald Foster, of the Department of Environmental Protection, Appearing on Behalf of Staff

DATE FILED: November 20, 2001

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DIRECT TESTIMONY OF GERALD FOSTER

- 2 | Q. Please state your name and business address.
- 3 A. Gerald B. Foster, 3804 Coconut Palm Drive, Tampa, Florida 33619.
- 4 Q. Please give a brief description of your educational background and
- 5 experience.

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- 6 A. I have a B.A. in biology from the University of South Florida, and also
- 7 have 16 years of experience in the environmental health/protection field.
- 8 | Q. By whom are you presently employed?
- 9 A. The Department of Environmental Protection (DEP).
- 10 | Q. How long have you been employed by DEP and in what capacity.
- 11 A. I have 12-plus years with DEP in the Drinking Water Section.
- 12 | Q. What are your general responsibilities at DEP?
- 13 A. Insuring that water systems comply with applicable rules and regulations
- 14 outlined in the Florida Statutes.
- 15 Q. Are you familiar with the Aloha Water system in Pasco County?
- 16 | A. Yes.
- 17 Q. Are the utility's treatment facilities and distribution system for this
- 18 division sufficient to serve its present customers?
- 19 A. Yes.
- 20 Q. Does the utility maintain the required 20 psi minimum pressure throughout
- 21 their distribution system?
- 22 | A. Yes.
- 23 | Q. Does the utility have an adequate auxiliary power source in the event of
- 24 a power outage?
- 25 | A. Yes.

- 1 | Q. Are the utility's water wells located in compliance with applicable DEP
- 2 regulations?
- 3 A. Yes.
- 4 | Q. Does the utility have certified operators as required by Chapter 62-602,
- 5 | Florida Administrative Code?
- 6 A. Yes.
- 7 Q. Has the utility established a cross-connection control program in
- 8 accordance with Chapter 62-550.360, Florida Administrative Code?
- 9 A. The utility has a cross connection control plan and the plan was reviewed
- 10 and accepted by DEP for rule compliance on August 18, 2000.
- 11 Q. Is the overall maintenance of the utility's treatment plant and
- 12 distribution system satisfactory?
- 13 A. Yes.
- 14 Q. Does the finished water produced by the utility meet the State and Federal
- 15 | maximum contaminant levels for primary and secondary water quality standards?
- 16 A. Yes.
- 17 Q. Does this include the lead and copper rule?
- 18 A. Yes.
- 19 Q. Has Aloha's compliance with the lead and copper rule resulted in a
- 20 lessening of the monitoring requirements?
- 21 A. Yes
- Q. Does the utility monitor for the organic contaminants listed in Chapter 62-
- 23 | 550, Florida Administrative Code?
- 24 A. Yes.
- 25 Q. Do recent chemical analyses of raw and finished water, when compared to DEP

- 1 | regulations, suggest the need for additional treatment?
- 2 A. No.
- 3 | Q. Does the utility maintain the required chlorine residual or its equivalent
- 4 throughout the distribution system?
- 5 A. Yes.
- 6 | Q. Are the plant and distribution systems in compliance with all other
- 7 | provisions of Title 62, Florida Administrative Code, not previously mentioned?
- 8 A. Yes.
- 9 Q. Has this utility been the subject of any DEP enforcement action within the
- 10 | past two years?
- 11 | A. No, not to my knowledge.
- 12 Q. Has the black substance in what is known as "black water" experienced by
- 13 | some Aloha customers been analyzed?
- 14 | A. Yes.
- 15 Q. If so, what is it?
- 16 A. Copper sulfate.
- 17 Q. Is it possible to create copper sulfate without a source of copper?
- 18 | A. No.
- 19 Q. Does the "black water" being formed in the customers' pipes appear to be
- 20 occurring after the water flows through the meter?
- 21 | A. Yes.
- 22 | Q. If the water at the meter meets all drinking standards, does this formation
- 23 of "black water" occurring after the water flows through the meter constitute
- 24 a violation of federal or state drinking water standards?
- 25 A. No.

- 1 | Q. Please explain how this "black water" is formed.
- 2 A. Naturally occurring hydrogen sulfide in the raw water reacts with copper
- 3 pipes in home plumbing. Copper sulfide is created. It is the copper sulfide
- 4 | that gives the water a black appearance.
- 5 Q. What steps has Aloha Utilities taken to alleviate the "black water"
- 6 problem?
- 7 A. The utility was permitted on December 12, 1995 to use a polyphosphate
- 8 corrosion inhibitor.
- 9 | Q. Do any of the home treatment units at some homes on the Aloha water system
- 10 | cause the corrosion inhibitor to be less effective?
- 11 A. Yes.
- 12 Q. Please explain how.
- 13 A. Home treatment units tend to remove minerals (calcium, iron, magnesium,
- 14 etc.) causing the water to become corrosive. The pH is lowered.
- 15 \ Q. Do you have anything further to add?
- 16 A. No, I do not.

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