

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 John R. Sowerby, P.E.**, of the Department of Environmental Protection, Appearing of Behalf of Commission Staff

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DIRECT TESTIMONY OF JOHN R. SOWERBY

Q. Please state your name and business address.

A. John R. Sowerby, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400.

Q. Please state a brief description of your educational background and experience.

6 A. I hold a Bachelor of Civil Engineering Degree from the University of Delaware and a
7 Master of Science Degree in environmental engineering from the Johns Hopkins University. I
8 have over 27 years of experience in the design review, permitting, construction inspection, and
9 regulation of public drinking water facilities and public wastewater facilities. During that
10 time, I have been employed as a public health engineer with the Maryland Department of
11 Health and as a professional engineer with the Florida Department of Environmental
12 Protection. I am a licensed professional engineer in the States of Florida, Maryland, and
13 Virginia.

14 Q. By whom are you presently employed?

15 A. The Florida Department of Environmental Protection.

16 Q. How long have you been employed with the Department of Environmental Protection
17 and in what capacity?

18 A. I have been employed by the Florida Department of Environmental Protection for
19 approximately 20 years. For the first 7.33 years, I was employed as a professional engineer in
20 the Department's Bureau of Local Government Wastewater Financial Assistance. For the past
21 12.67 years, I have been employed as a professional engineer in the Department's Drinking
22 Water Program.

23 Q. What are your general responsibilities at the Department of Environmental Protection?

24 A. I develop and write State rules regulating the design, permitting, construction,
25 operation, and staffing of public drinking water systems, and I provide guidance on the

1 implementation of these rules. Additionally, I have developed and written State primary
2 drinking water standards for disinfectants and disinfection byproducts, and I provide guidance
3 on the implementation of these standards.

4 Q. Are you familiar with the Aloha Utilities water systems in Pasco County, particularly
5 the Seven Springs system?

6 A. No, I am not familiar with any details of the Aloha Seven Springs System, but I
7 understand that the system is a community water system, and I can address questions
8 concerning application of our rules to the system and questions concerning whether the system
9 is complying with our rules.

10 Q. Does the finished water produced by the utility meet the State and Federal maximum
11 contaminant levels for primary and secondary water quality standards?

12 A. Yes, based upon information provided to me by the Department's Southwest District
13 Office, Aloha currently meets all applicable primary or secondary drinking water standards.

14 Q. Does this include the lead and copper rule?

15 A. Yes, the lead and copper rule is considered a primary drinking water standard, and
16 based upon information provided to me by the Department's Southwest District Office, Aloha
17 currently complies with the lead and copper rule.

18 Q. Has the utility's compliance with the lead and copper rule resulted in a lessening of the
19 monitoring requirements?

20 A. Yes, based upon information provided to me by the Department's Southwest District
21 Office, Aloha has optimized its treatment for lead and copper and qualifies for reduced
22 monitoring.

23 Q. Does the utility maintain the required chlorine residual or its equivalent throughout the
24 distribution system?

25 A. Yes, based upon information provided to me by the Department's Southwest District

1 Office, Aloha consistently maintains throughout its distribution system a free chlorine residual
2 equal to, or greater than, the minimum 0.2 mg/L required by the Department.

3 Q. Has the utility been the subject of any Department of Environmental Protection
4 enforcement action within the past two years?

5 A. No, based upon information provided to me by the Department's Southwest District
6 Office, Aloha has not been the subject of any Department enforcement action within the past
7 two years.

8 Q. Concerning hydrogen sulfide in drinking water, what rules does the DEP have in place
9 that addresses hydrogen sulfide concentrations?

10 A. The Department has a secondary standard, or secondary maximum contaminant level,
11 for odor of 3 as a threshold odor number and a secondary standard, or secondary maximum
12 contaminant level, for color of 15 color units. Additionally, the Department has a fairly new
13 rule, Rule 62-555.315(5), requiring that applicants for a construction permit to connect a new
14 or altered well to a community water system provide appropriate treatment as necessary to
15 reduce total sulfide in the water from the new or altered well to less than 0.3 mg/L.

16 Q. What was the reasoning behind the implementation of the DEP's rule for total sulfides
17 in a new or altered well?

18 A. The rule was recommended in the final report for the Interagency Copper Pipe
19 Corrosion Project, which was completed several years ago and involved the Florida Public
20 Service Commission, the Florida Department of Environmental Protection, and the Florida
21 Department of Community Affairs. I was not directly involved in the project.

22 Q. How would those rules addressing odor, color, and total sulfides apply to Aloha
23 Utilities?

24 A. The secondary standards for odor and color apply to Aloha, and based upon
25 information provided to me by the Department's Southwest District Office, Aloha currently

1 | meets the standards. The rule requiring appropriate treatment as necessary to reduce total
2 | ulfides in water from new or altered wells would apply to Aloha only if Aloha were to
3 | equest a construction permit to connect a new or altered well to its system, and even then, the
4 | ule would apply only to water from the new or altered well and not to water from existing
5 | vells.

6 | Q. What is the point in Aloha's system where the utility would draw a sample for testing
7 | o comply with DEP requirements, such as odor or color?

8 | A. Samples for odor and color must be taken at each entry point to a water system's
9 | istribution system.

10 | Q. As related to testing, is it true that for the most part, samples are collected at the water
11 | olant, at its introductory point to the distribution system?

12 | A. Yes, samples for most contaminants, including inorganic contaminants other than
13 | asbestos, organic contaminants, radionuclides, and secondary contaminants, must be taken at
14 | each entry point to a water system's distribution system. However, samples for asbestos,
15 | disinfectant residuals, disinfection byproducts, or coliform bacteria must be taken in the
16 | distribution system, and samples for lead or copper must be taken at customers' taps.

17 | Q. Would the DEP have a problem with any utility testing at additional points in the
18 | distribution system, other than the entry point at the treatment plant?

19 | A. No, the Department would have no problem as long as the utility tested at the locations
20 | required by our rule as well as at such additional points.

21 | Q. What about frequency of testing? Would the DEP have a problem if the utility
22 | conducted tests more frequently than the DEP's rules require?

23 | A. No, the Department would have no problem if a utility were to conduct tests more
24 | frequently than required by our rules.

25 | Q. Are you familiar with the hydrogen peroxide pilot project now being conducted at

1 Aloha's Seven Springs water system?

2 A. No.

3 Q. The parameter set by the Copper Corrosion and Black Water rule for total sulfides
4 states that total sulfides should not exceed 0.3 mg/l in the finished water. Is this a goal or an
5 action level, and does it apply only to new or altered wells?

6 A. Rule 62-555.315(5), Control of Copper Pipe Corrosion and Black Water, requires that
7 appropriate treatment be provided to reduce total sulfide in the water from a new or altered
8 well if total sulfide in the raw water from the well equals or exceeds 0.3 mg/L. I would call
9 his 0.3 mg/L total sulfide level an action level because it is the level at which a construction
10 permit applicant must act to provide appropriate treatment. This action level applies only to
11 water from new or altered wells being connected to a community water system.

12 Q. Is it your testimony that the amount of sulfides in Aloha's drinking water is acceptable
13 under the DEP's rules?

14 A. Yes. The Department has no standard or requirements, other than the requirements
15 under Rule 62-555.315(5), regarding sulfide in drinking water.

16 Q. Would the DEP allow Aloha to treat its water for total sulfides removal to enhance the
17 water quality?

18 A. Yes, but if this were to involve the construction of new water system facilities or the
19 alteration of existing water system facilities, Aloha would first have to obtain a construction
20 permit from the Southwest District Office of the Department.

21 Q. Do you know if a permit has been applied for by Aloha to modify its treatment
22 process?

23 A. I understand, based upon information provided to me by the Southwest District Office
24 of the Department, that Aloha applied for a construction permit to convert from chlorination to
25 chloramination and that the Southwest District Office issued the permit on December 30,

1 | :004, allowing for this conversion.

2 | Q. Do you have anything further to add?

3 | A. No.

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BEFORE THE PUBLIC SERVICE COMMISSION

In re: Application for increase in water rates for Seven Springs System in Pasco County by Aloha Utilities, Inc. | DOCKET NO. 010503-WU
| DATED: JANUARY 27, 2005

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the DIRECT TESTIMONY OF JOHN R. SOWERBY, P.E., on behalf of the Florida Public Service Commission Staff has been furnished to the following, this 27th day of January, 2005:

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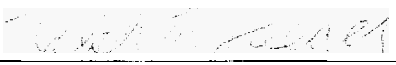
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